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Wholly Owned Subsidiary as an Entry Mode in China:
Cases of Six Finnish Companies

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YHTEENVETO

Tutkimuksen tarkoitus

Viimeisen kahdenkymmenen vuoden aikana Kiina on kivunnut toiseksi eniten ulkomaisia investointeja saavien maiden listalla. Myös Kiinaan tehtyjen ulkomaisten investointien rakenne on muuttunut huomattavasti. Kun vielä 1980-luvun loppupuolella ja 1990-luvun alussa suurin osa ulkomaisista investoinneista Kiinaan tehtiin yhteisyritysten muodossa, nykyään ulkomaiset yritykset perustavat yhteis-yritysten sijaan omia tytäryhtiöitä.

Tässä tutkimuksessa pyritään selvittämään miksi ulkomaisten investointien rakenne Kiinassa on muuttunut. Erityisesti keskitytään siihen miten toimintaympäristön muutokset Kiinassa ovat vaikuttaneet ja vaikuttavat nykyään yritysmuodon valintaan. Kysymystä tarkastellaan sekä kirjallisuuden pohjalta, että kuuden esimerkkiyrityksen kautta.

Teoreettinen viitekehys

Tutkimuksen teoreettisessa osassa käydään läpi ulkomaisiin investointeihin ja yritys- tai toimintamuodon valintaan liittyvää teoriaa. Erityisesti keskitytään kysymykseen mitkä tekijät vaikuttavat valintaan tytäryhtiön ja yhteisyrityksen välillä. Kysymystä tarkastellaan sekä kansainvälistymisteorian, transaction cost teorian, että bargaining power teorian pohjalta. Toisessa osassa teoreettiseen viitekehykseen tuodaan mukaan myös Kiinan toimintaympäristö ja sen vaikutukset.

Case-esimerkit

Tutkimus perustuu kirjallisuuskatsaukseen ja kuuteen case-esimerkkiin. Mukana olevat kuusi casea ovat kertomuksia suomalaisten yritysten kokonaanomisteisista tytäryhtiöistä Kiinassa, ja siitä miten nämä yritykset päätyivät perustamaan juuri oman tytäryhtiön aikaisemmin suositun yhteisyrityksen sijaan. Case-yritykset ovat: Neste Kunshan, Shanghai Thermo Labsystems, Wecan Electronics Suzhou, Metso Minerals Tianjin, Guangzhou Novo Technology Development ja Kaukomarkkinat.

Tärkeimmät tulokset

Tärkein syy ulkomaisten tytäryhtiöiden yleistymiseen ja yhteisyritysten vähentymiseen Kiinassa on se, että ulkomaisia yrityksiä koskeva lainsäädäntö on muuttunut vuosien mittaan sallivammaksi. Ulkomaisilla yrityksillä on nykyään myös enemmän kokemusta Kiinasta, ja siksi Kiinalaista partneria ja monesti hankalaa yhteisyritys-muotoa ei nähdä enää välttämättömänä.

Asiasanat: Kiina, ulkomaiset investoinnit, tytäryhtiöt, yhteisyritykset

ABSTRACT

Purpose of the study

During the past twenty years China has become the second largest recipient of foreign direct investment (FDI) in the world. The structure of FDI has also changed enormously. While still in the late 1980s and early 1990s nearly all FDI was made through joint ventures, nowadays most foreign investors are investing in China without Chinese partners through wholly owned subsidiaries.

This study is designated to explore the foreign direct investment environment in China. And more particularly, to understand the change that has happened as more and more foreign investors are establishing wholly owned subsidiaries instead of the traditional Chinese-foreign joint ventures.

Theoretical Framework

In the theoretical part of this study foreign direct investment and entry mode literature is explored to understand how foreign investors choose between joint venture and wholly owned subsidiary modes. Both internationalization and transaction cost views are explored, as well as bargaining power theory.

The understanding derived from these theories is then combined with what is known about China as a business environment to explain why the structure of FDI into China has changed during the past years, and why the WFOE is becoming a more popular entry mode option.

Cases

The research was conducted by using desk research and a multiple case study method. The cases include descriptions of six Finnish wholly owned subsidiaries in China and their entry mode decisions. The companies are: Neste Kunshan, Shanghai ThermoLabsystems, Wecan Electronics Suzhou, Metso Minerals Tianjin, Guangzhou Novo Technology Development and Kaukomarkkinat.

Major Findings

The most important reason for the increase of wholly owned subsidiaries and the decrease of joint ventures in China is the changes in legislation and the more permissive foreign investment policy. Foreign companies have also gained experience of China, and thus do not necessarily need a Chinese partner and the difficult joint venture form anymore.

Key Words: China, foreign direct investment, wholly owned subsidiaries, joint ventures, entry mode

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1 INTRODUCTION

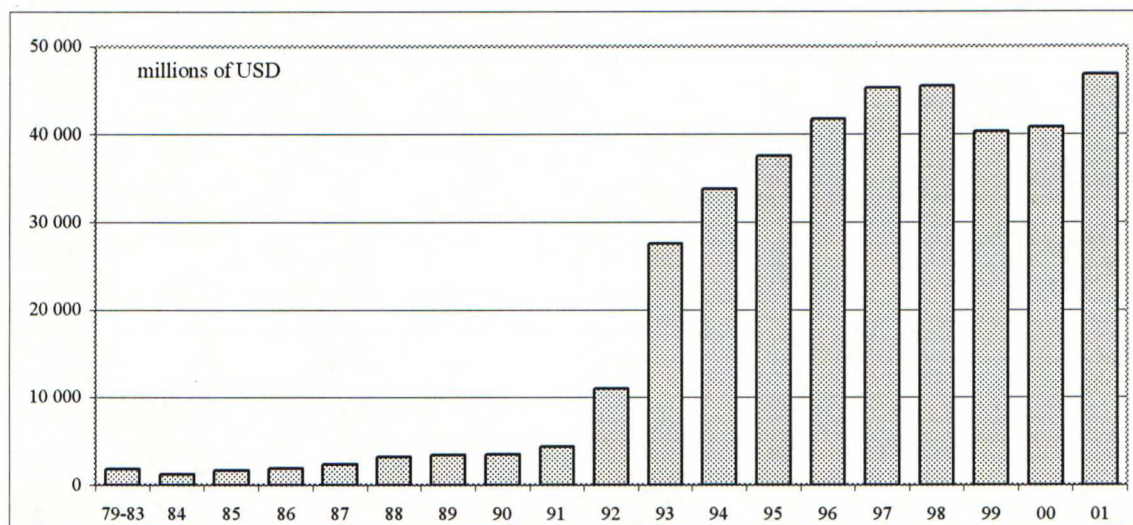
1.1 BACKGROUND

After being a closed economy for decades, in 1979 Peoples Republic of China chose the open door policy to develop its economy and industries. Open door policy was adopted because the Chinese government believed it could acquire four items that the country desperately needed: capital, high technology, advanced management know-how and access to international markets.

Since the opening, foreign direct investment (FDI) into China has grown drastically. The growth of FDI has been especially fast since 1992, when Deng Xiaoping's government adopted the "socialist market economy" doctrine and sped up market-oriented reforms. By 1995 the inflow of FDI into China already ranked the second highest in the world, only behind the USA. In 2001 the inflow of FDI into China accounted \$46 billion.

The foreign invested enterprises (FIEs) have played a major role in the modernization of the Chinese economy. The share of total industrial output in China made by the FIEs reached 18.6% in 1997. Also, FIEs share of the total national export volume was 41% and they employed 17.5 million Chinese. (UNCTAD, 1998) See also Appendix 1.

Table 1-1: Foreign Direct Investment into China 1979-2001



Sources: China Statistical Yearbooks 1989-2000, China Monthly Economic Indicators 2001/8 and MOFTEC.

Although China opened for foreign investment already over twenty years ago, the subject of FDI in China is still interesting and very timely. The investment environment in China has

changed enormously over the past twenty years, and more is to come as China is joined the WTO in 2001. According to Luo (2000, 26) China is now entering the more difficult phase of its reforms, that of developing the legal, administrative and regulatory framework that supports a modern economy. Until this is complete, China will be a challenging and sometimes difficult environment for foreign firms. Yet China continues to attract foreign companies. Not surprising, as China is not only a source of cheap labour, but unlike many other developing countries China is the world's largest emerging market.

This study is designated to explore the foreign direct investment environment in China. And more particularly, to understand the change that has happened as more and more foreign investors are establishing wholly owned subsidiaries instead of the traditional Chinese-foreign joint ventures.

1.1.1 Foreign Direct Investment Forms in China

The choice of entry modes into China has expanded in the recent years. Entry modes available to international trading businesses include conventional import and export, flexible trade (i.e., processing imported materials or foreign samples and assembling imported parts and components), international leasing and counter-trade (Luo 2001).

For foreign direct investors the Chinese government has classified the following modes of entry: (1) **contractual (or cooperative) joint venture**, (2) **equity joint venture** and (3) **wholly foreign owned enterprise**. In addition, foreign companies can invest in China through joint exploration projects (e.g. oil exploration projects), whose significance to the total FDI in China is however marginal. (See e.g. Luo 2000)

Equity joint venture (EJV) (hezi qiye):

By definition, equity joint venture (EJV) is a limited liability corporation between Chinese and foreign partner(s). An EJV has a legal person status. The most important legislation governing the EJVs is "Law on Joint Ventures Using Chinese and Foreign Investment" (1979) and "Implementing regulations" (1983 and 2001).

In EJV the equity split is determined by the proportions of partner's contributions. Foreign partner(s) must contribute at least 25 % of the venture's registered capital. Contributions can take the form of cash (foreign currency or renminbi), land-use rights, buildings, equipment,

materials, intellectual property, or labour. In a typical EJV in China, the Chinese partner contributes land, labour, raw materials and production facilities, but seldom cash equity or operating capital. The foreign partner is often expected to provide the technology, capital equipment and machinery, management, access to world market, and possibly additional working capital beyond a financial equity contribution. (Pan et al., 1995, 126) The EJV is usually managed jointly - under the direction of a board of directors, generally selected by the investors in proportion to their respective share of equity investment. (Kaiser et al., 1996, 46) Risks, profits and losses are allocated in proportion to contributions.

Contractual Joint Venture (CJV) (hezuo qiyi):

In addition to the equity joint venture, the Chinese law defines also another kind of joint venture form. Contractual joint venture (CJV) is a contractual partnership between Chinese and other foreign partner(s). The CJV subsumes a variety of arrangements whereby the Chinese and foreign partner(s) cooperate in joint projects and business activities according to the terms and conditions stipulated in a venture agreement. In contrast to the EJV, the CJV does not necessarily require the creation of a new legal entity. The CJV can take any form of agreement and provides, therefore, more flexibility in negotiation than the EJV. (Kaiser et al., 1996, 47)

As in EJVs, also in CJVs foreign partners must contribute at least 25 percent of the venture's registered capital. Contributions can be in a variety of forms, including cash (foreign currency or renminbi), land-use rights, buildings, equipment, materials, and intellectual property. The most important legislation concerning the CJVs is: "Sino-Foreign Cooperative Contractual Joint Venture Law" (1988), and "Sino-Foreign Cooperative Joint Venture Law Implementing Rules" (1995 and 2001).

Wholly Foreign Owned Enterprise (WFOE) (waizi duzi qiyi):

By definition wholly foreign owned enterprise (WFOE) is a company solely owned and operated by a foreign investor or investors, who bear all risks and receive all profits. WFOEs are organized as a limited liability companies. They have a legal person status, and can own, use and dispose of property; can carry out management and production activities independently. Earlier a WFOE had to export 50 percent of its output or qualify as a high technology enterprise. However, in 2001 these requirements were removed.

The major legislation concerning the WFOEs is: "PRC Law Concerning Enterprises with Sole Foreign Investment" (1986) and "Implementing regulations" (1990 and 2001).

Other Investment Vehicles

In addition to the EJV, CJV and WFOE, foreign investors can establish representative or branch offices. During the late 1990's the Chinese policymakers have also introduced new investment vehicles (foreign-invested share company and holding company), and enacted new legislation (e.g. the regulations on mergers and acquisitions). These are introduced briefly below.

Although technically not considered a foreign-invested enterprise, a **representative office (dai biao chu)** is a quick and relatively simple way to become acquainted with the China market and thus a popular first step for new entrants to China. Representative offices allow firms to establish contacts with key industrial ministries and begin to build their company's reputation in China. By law, representative offices are prohibited from engaging in direct, profit-making business activity in the PRC, but are allowed to undertake non-commercial activities - including business communication, product promotion, market research, contract administration and negotiations on behalf of the head office.

The branch office (fen gongsi) is a relatively new alternative for the traditional representative office. However, at the moment only a few service sectors, such as law and banking, have been given branching rights. The US-China WTO agreement mentions that branching rights will be dealt with in an upcoming PRC law. Thus the future utility of branches depends on how the PRC policymakers will adapt Chinese laws concerning branch offices.

For a long time foreign investors suffered from the limitations of China's rigid FDI structures. For example, it was very difficult or impossible to combine multiple operations under one roof, or restructure inefficient JVs. In the late 1990's it became possible to establish **holding or investment companies (konggu gongsi)** that allow foreign companies with several investments in China to combine sales, procurement, subsidiary investment, manufacturing and service activities. By the end of 1999, Chinese authorities had approved more than 180 holding companies (Sutter, 2000).

Another advancement in the FDI regulation that facilitates the consolidation of foreign companies operations in China was the issue of “The Regulations on the Merger and Division of Foreign Invested Enterprises” in 1999. Most of the merger and acquisition activity involving foreign invested enterprises (FIEs) to date has involved either the sale of one FIEs equity interest in a venture to another FIE, or the buy-out of a Chinese partner (Sutter, 2000).

And lastly, the **foreign-invested share company (FISC)** or **limited company (gu fen you xian gongsi)** is a hybrid investment vehicle that combines elements of the traditional joint venture and the Chinese joint-stock limited liability company. Limited companies raise capital by issuing shares and can be listed on the PRC stock exchanges. However, although the law on FISCs was passed already in 1994, the FISC is still very much experimental and it's use has also been small due to its feasibility only for companies making very large investments in China.

1.1.2 The Structure of FDI in China

The first step of the open door policy was the promulgation of the law on foreign joint ventures in 1979. This law made it possible for foreign enterprises to enter China by establishing joint ventures with Chinese companies. “The Law on Enterprises Operated Exclusively with Foreign Capital”, that made wholly foreign owned enterprises (WFOE) possible came later in 1986.

Table 1-2: Number of Contracted FIEs by Type 1988-2001

	Equity Joint Ventures		Contractual Joint Ventures		Wholly foreign owned enterprises		Other
	number	%	number	%	number	%	
1988	3909	65,8	1621	27,3	410	6,9	5
1989	3659	63,3	1179	20,4	931	16,1	10
1990	4091	56,2	1317	18,1	1860	25,6	5
1991	8395	64,7	1778	13,7	2795	21,5	10
1992	34354	70,4	5711	11,7	8692	17,8	7
1993	54003	64,7	10445	12,5	18975	22,7	14
1994	27890	58,7	6634	14,0	13007	27,4	18
1995	20455	55,3	4787	12,9	11761	31,8	8
1996	12628	51,4	2849	11,6	9062	36,9	17
1997	9001	42,9	2373	11,3	9602	45,7	25
1998	8107	40,9	2003	10,1	9673	48,9	16
1999	7050	41,7	1656	9,8	8201	48,5	11
2000	8378	37,5	1757	7,9	12196	54,6	16
2001 (Jan.-Jul.)	5653	34,6	1031	6,3	9650	59,0	10

Adapted from China Statistical Yearbooks 1989-2000 and China Statistical Abstract 2001.

Until quite recently the equity joint venture was the most common investment vehicle used by foreign investors. Between 1979 and June 2000, foreign companies entered into 201,848 equity joint venture contracts (Sutter, 2000). However, in the 1990's the share of wholly foreign owned enterprises has been increasing considerably. While in 1990 only 12% of all foreign-funded enterprises approved up to then were WFOEs, in 1997, WFOEs surpassed equity joint ventures as the most popular foreign investment vehicle. Between 1979 and June 2000, foreign firms signed 100,624 WFOE contracts. (Sutter, 2000)

1.2 RESEARCH OBJECTIVES AND QUESTIONS

Since the opening of China there has been a lot of research on FDI operations in China. Especially management of Sino-foreign JVs has been studied widely (see e.g. Ali-Yrkkö et al. 1999, Beamish 1993, Hamill and Pamblos 1996, Kaukonen 1994, Martinson and Tseng 1995, Pan et al. 1995, Shenkar 1990, Wong et al. 1999, Zee and Ho 1994). Several case studies also exist on Finnish joint venture companies in China (see e.g. Ali-Yrkkö et al. 1999, Kaukonen 1995, Al-Obaidi 1999, Suonperä 1999 and Sipilä 1996). Sino-foreign JVs tend to dominate the academic research and literature written on doing business in China, while so far WFOEs have received very little attention. Most of the books on doing business in China concentrate on JV management whereas WFOEs are only briefly covered.

Luo (2000a) has studied entry mode selection in China and his work also contains many case studies of western wholly owned subsidiaries in China. Finnish wholly owned subsidiaries have not been studied before from the entry mode selection perspective, excluding one short case description in Ali-Yrkkö et al. (1999).

Earlier, the general opinion seemed to be that although Sino-foreign joint ventures are troublesome and hard to manage even in stable environments, a JV is the "best - indeed the only" way to enter China (Vanhonacker 1997). However, as the regulatory and business environment in China is evolving more and more western companies are choosing the WFOE instead of the "conventional" JV. The objective of this study is to understand how the environment in China affects entry mode decisions. Especially, which factors are important when considering the WFOE as an entry mode?

Research Questions:

- Question 1: Why has the structure of FDI into China changed during the past years?
 Why is the WFOE becoming a more popular entry mode option?
- Question 2: What kind of Finnish companies have established WFOEs in China? Why
 did they choose the WFOE mode?

The research question #1 aims to study the phenomenon of increasing number of WFOEs on a macro level. The question is discussed in chapters 2 and 3 based on existing literature, and developed into a theoretical framework for the empirical part of this research. The research question #2 is tackled in the empirical part of the study (chapters 4 and 5) by using a multiple case study method. The purpose of the case studies is to illustrate the phenomenon of increasing number of WFOEs and the reasons behind it, not to study the companies themselves. The emphasis is on the history and what has happened. This study does not try to predict the future.

1.3 LIMITATIONS

The focus of this study is on wholly foreign owned subsidiaries (WOS) in China. When discussing the operation mode choice the WOSs are mainly compared against the other *foreign investment* alternative - joint ventures. Other operation modes such as exporting and licensing are not considered. Secondly, although there are some other forms of foreign direct investment (such as joint exploration projects) in China, their significance to total FDI is marginal. For the vast majority of companies the foreign investment options in China are wholly owned subsidiaries and joint ventures. Thus the question in this study is whether to invest in China alone or with a partner.

Thirdly, the question of acquisition vs. greenfield investment is not given great attention, as the focus of this study is, as mentioned, whether to have a local partner or not. Most wholly foreign owned subsidiaries in China are greenfield investments, though some have been formed by buying out the Chinese partner in a joint venture.

Fourthly, this study concentrates on business operations in *mainland* China. Although Hong Kong was returned to China in 1997 and Macao in 1999, they maintain a Special Administrative Region (SAR) status, and can be considered almost as separate countries. Thus any of the investment legislation in China or the phenomenon of changing investment structure does not concern them. Foreign companies have for decades used Hong Kong as a bridgehead to China and thus Hong Kong is an important part of their China strategies. However, wholly owned subsidiaries in Hong Kong are not included in this study.

1.4 DEFINITIONS AND ABBREVIATIONS

Definitions

Entry/investment mode:

An institutional arrangement for organizing and conducting international business transactions, such as contractual transfers, joint ventures and wholly owned operations (Root, 1987). In this study, this term is mostly used to refer to *direct investment modes*. Also, the term entry/investment mode is used to refer not only to the first entry to the country, but also to all following investments.

Foreign direct investment, FDI:

Foreign direct investments are investments in an already existing company (acquisition) or in a company to be established (greenfield) abroad, in whose management and control the investor is participating on the basis of the investment made (Luostarinen and Welch 1994).

Joint venture, JV:

The term joint venture has two major meanings: (1) equity joint venture, and (2) contractual joint venture (Luostarinen and Welch 1994). In this study the term joint venture is used mostly to refer to equity joint ventures. A (equity) joint venture is a company whose ownership and control are shared between two parent companies (Root 1987). In the context of this study, these partners are a foreign (Finnish) investor and a local (Chinese) partner.

Wholly owned subsidiary, WOS:

Wholly owned subsidiary is a subsidiary, which is fully owned by the mother firm (Luostarinen and Welch 1994), in the context of this study a foreign (Finnish) investor.

Abbreviations

CJV:	Contractual Joint Venture / Cooperative Joint Venture. Chinese term: <i>hezuo qiye</i> .
EJV:	Equity Joint Venture. Chinese term: <i>hezi qiye</i> .
FIE:	Foreign Invested Enterprise, a term used by Chinese government to refer to all foreign invested companies: equity joint ventures (EJV), contractual joint ventures (CJV) and wholly foreign owned enterprises (WFOE).
FISC	Foreign-Invested Share Company
IPR	Intellectual Property Rights
LDC	Less developed country
MOFTEC:	China's Ministry of Foreign Trade and Economic Cooperation.
PRC	People's Republic of China
RMB	Renminbi, "The People's Currency", the Chinese Yuan
SEZ	Special Economic Zone
Sino:	China, Chinese, (sinology = study of China)
SOE	State Owned Enterprise
WFOE	Wholly Foreign Owned Enterprise. Sometimes also referred to as WOFE (wholly owned foreign enterprise). A form of enterprise, defined in the Chinese law that is solely owned and operated by a foreign investor or investors. Chinese term: <i>waizi duzi qiye</i> .
WOS	Wholly Owned Subsidiary. WOS is a term used in general business literature. The meaning of WOS is the same as the meaning of WFOE, that is the term used in Chinese law.
WTO	World Trade Organization

1.5 STRUCTURE OF THE STUDY

The study begins with a literature review in chapters 2 and 3. Chapter 2 discusses the theories of entry mode selection, while chapter 3 concentrates on the investment environment in China.

Chapter 2 first present factors affecting a company's entry mode choice and then discusses several different theories and frameworks explaining it. These are divided into three main paragraphs: internationalization model, transaction cost perspective and bargaining power framework. In chapter 3 the research question 1 (Why has the structure of FDI into China changed during the past years? Why are WFOEs becoming a more popular entry mode option?) is tackled. This chapter discusses the effects of Chinese government policy and the challenging business environment in China. Finally, the last sub-chapter (3.3) presents the framework for the empirical part of this study that attempts to combine both the theoretical perspective of entry mode choice discussed in chapter 2 and the aspects of China as investment environment discussed in chapter 3.

Chapter 4 presents the methodology used in the empirical research. Chapter 5 presents the empirical finding of this study. The chapter first introduces the six case companies, their operations in China and the reasons why they selected the wholly owned subsidiary mode. After the case descriptions follows a discussion where the most important factors are identified, and the six cases are compared against each other and against the theory.

Lastly, chapter 6 summarizes the study and its main findings, draws conclusions and gives managerial recommendations and suggestions for further research.

2 METHODOLOGY

2.1 SELECTION OF APPROACH

The objective of this study is to describe the environment in which foreign direct investment occurs in China, and to understand why more and more foreign companies are choosing the wholly owned subsidiary as their entry mode. The unit of analysis for this study is the entry mode choice and the context of the study is Finnish companies in China. The phenomenon under scrutiny is the increasing number of wholly owned foreign subsidiaries in China.

A major part of this study consists of the literature review. The existing literature on foreign direct investment in China is plentiful, and provides a major source of evidence. The second part of this study consists of multiple case studies. The cases are used as examples for highlighting the phenomenon of increasing numbers of wholly owned subsidiaries and understanding the reasons behind it. Thus, the case descriptions are rather short and do not try to address all aspects of the companies. The data collected was qualitative in nature, and the approach in the cases is both descriptive and explanatory.

The case study approach was chosen firstly because, for example according to Yin (1989, 13), a case study strategy is a natural choice when a “how” and/or a “why” research questions are asked about contemporary set of events, over which the investigator has little or no control. Secondly, the complexity of the phenomenon and the need for in depth knowledge, that could not have been obtained through a survey called for a case method. In addition, the choice of a case method was also motivated by the researcher’s want to collect information on real-life practical experiences, that could be useful to other companies when considering their options in China.

Naturally, there are some negative aspects in using the case study method. These include overly complex or narrow and inimitable theory (Eisenhardt 1989, 547), lack of rigor in research, insufficient basis for scientific generalization, and massive, tedious reports (Yin 1989, 21). Another weakness of the case-study method is the increased subjectivity of the results. According to Yin (1989, 21) these problems can be avoided by meticulous case-study design that reduces the threat of ambivalent evidence influencing conclusions, and by generalizing theories in an analytical, not statistical way. Researcher should also try to maintain objectivity during both data collection and data analysis.

2.2 RESEARCH DESIGN AND DATA COLLECTION

The research design of this study is based on Yin's (1989) and Eisenhardt's (1989) literature on case study methodology.

1. Literature was reviewed on entry mode theories, foreign direct investment and investment environment in China.
2. Based on the literature reviewed, a conceptual framework was developed.
3. Information was gathered from the following sources to select the case companies:
 - a. Finpro – The Foreign Trade Association, especially the Shanghai office.
 - b. Economic and business newspapers, magazines and the Internet
 - c. Managers, who are familiar with Finnish companies' business in China
4. The case companies were selected. An ideal number of cases in this type of a study would be 4-10. Less than four cases would not yield very convincing results, while more than 10 cases would result in overwhelming volume of data. While the total number of Finnish wholly owned subsidiaries in China is around 20 (Kaislaniemi 2002), six companies were selected for the case studies. They are Finnish companies who have a wholly owned subsidiary in China (Wecan Electronics, Novo Group, ThermoLabsystems and Metso), have had a wholly owned subsidiary (Neste Kunshan - the former subsidiary of Neste/Fortum), or are planning to establish a wholly owned subsidiary (Kaukomarkkinat). The case companies were selected so that they would represent very different kind of stories of entry mode choice:
 - a. Neste Kunshan (polyester paints) was the first Finnish wholly owned subsidiary and also Neste Chemical's first investment in China. For a long time Neste negotiated with a potential JV partner, but at the last moment decided to invest alone.
 - b. Wecan Electronics (electronics contract manufacturer) represents companies who have followed their customer (Nokia) to China without having any previous experience themselves.
 - c. Novo Group is an IT company that has both a joint venture and a wholly owned subsidiary in China.
 - d. Shanghai ThermoLabsystems (pipettes and medical instruments) is a classical case of a company who started its operations in China as a joint venture but ended up

in problems with the Chinese partner. After a few years the company was successfully changed into a wholly owned subsidiary.

- e. Kaukomarkkinat is a trading house with 50 years of experience of doing business in China. Kaukomarkkinat's story is closely related to China's WTO membership and the trading business opening to foreign companies.
- f. Metso is one of the largest Finnish companies in China, with very broad and long experience. Metso (at that time Valmet) established the first Finnish JV in China, Valmet Xian. At the moment Metso has 2 JVs, 3 WFOEs, 10 representative offices and 1 technology and service center in China.

5. The data collection included the following stages:

- a. Information on the case companies was gathered from general sources such as annual reports, magazines, newspapers, Internet home pages, seminar presentations and earlier case studies written about the companies.
- b. Suitable interviewees were searched. The interviewees were managers in the group or the subsidiary in China, who were involved in making the investment (and entry mode) decision, and/or have been involved in the management of the subsidiary. 1-2 managers were interviewed for each case study.
- c. General case study questions were drafted based on the preliminary understanding of the literature. The case study questions were also reviewed together with a senior consultant Ilpo Kaislaniemi at Finpro. The interview questions were refined and adapted for each interview according to the available information. The rough outline of interview questions is presented in Appendix 2.
- d. Semi-structured interviews (see list of interviews in 'References') were conducted in Finland in April-August of 2002. A basic outline of questions was used in all interviews, but the interviewees were allowed to speak freely and were also encouraged to talk about issues that they felt were important for the understanding of the subject. The emphasis was on understanding the "why" aspect of each companies entry mode decision. All interviews were conducted in Finnish, which is the native language of both the interviewer and the interviewees. The direct quotes that appear in the cases have been translated into English by the author. The interviews lasted 1 - 2 hours and they were all tape-recorded for better validity.
- e. The description of the factors affecting each case companies entry mode choice was written based on the collected data.
- f. The resulting case descriptions were sent to the interviewees for comments.

2.3 RELIABILITY AND VALIDITY

According to Yin (1989) a case study investigator has to consider four aspects of the quality of the case study design: construct validity, internal validity (only for causal studies), external validity and reliability.

Construct validity of a study means in short that the operational measures chosen to investigate the phenomenon really measure what they are supposed to, i.e. the object of the study and not another phenomenon. In this study data was gathered from multiple sources. First, theoretical literature was reviewed to find factors affecting entry mode choices. Then, literature on FDI and business in China were reviewed to find the factors most relevant in case of China. Finally, six case studies were made to give real life examples.

In qualitative research internal validity is a measure of whether the researchers description of the phenomenon is truthful, and whether causal relationships and conclusions are right (Miles and Huberman 1994). For the research question #1 (“why has the structure of FDI into China changed during the past years?”) the evidence is strong and thus the conclusions can be considered valid. The six case studies are descriptive in nature and their purpose is simply to serve as examples. No arguments or conclusions are drawn based on the cases.

External validity refers to the generalizability of the results. This study describes the particular historical development that has occurred in China and the results are not generalizable to other countries. The six case examples can be generalized to some extent, as many companies have similar histories and experiences of China. However, they do not represent all wholly owned subsidiaries in China.

Reliability of a study means that another investigator using the same data collection procedures would be able to get the same results as the original investigator if the study were to be repeated. Thus the study is to be independent of the researcher. (Yin 1989) The research process (done according to Yin’s (1989) and Eisenhardt’s (1989) suggestion) has been described in chapter 3.5. To improve the reliability several data sources (interviews, annual reports, company websites, press releases, newspaper article, earlier case studies and books) were used in writing the cases.

The difficulty in conducting the case studies was to find more than one interviewee per company that would have been able to answer the case study questions. However, although the cases are based only on one or two interviews per company, they are adequate in giving a general view of the most important factors affecting the entry mode decision. All the interviewees had a positive attitude towards the research project and were willing to participate in it. Most of the interviewees were also quite open in discussing their mistakes and difficulties, not only successes.

The case descriptions aim to describe the companies' histories in China and the reasons that led them to choose the WFOE mode. The case descriptions do not attempt to evaluate the financial success of the subsidiaries or their future prospects, since that could not have been done based on the data available to the researcher.

3 ENTRY MODE CHOICE THEORIES

A company seeking to enter a foreign market must take an important strategic decision on which entry mode to use for that market. In addition to the form of investment, ownership arrangements are a critical element of the FDI strategy. This includes the choice between a wholly owned subsidiary (WOS) and a joint venture (JV). The mode of foreign entry influences the extent of control the firm can exercise on its foreign operations (Anderson & Gatignon, 1986) and its subsequent performance (Hill et al. 1990).

Figure 3-1: Hierarchy of Entry Modes

Choice of Entry Modes			
Non-Equity Modes		Equity Modes	
Export <ul style="list-style-type: none">- Direct export- Indirect export- Others	Contractual Agreements <ul style="list-style-type: none">- Licensing- R&D contracts- Alliances- Others	Equity Joint Ventures <ul style="list-style-type: none">- Minority- 50% share- Majority	Wholly Owned Subsidiaries <ul style="list-style-type: none">- Greenfield- Acquisition- Others

Source: Pan and Tse (2000)

The question of entry mode decision has been studied and discussed widely in the international business literature. Several conceptual frameworks on international entry mode have been introduced and tested, and they provide complementary and overlapping explanations of the market entry strategy in foreign markets. These include e.g. the following: stages pattern of internationalization (Luostarinen, 1970 and 1979; Johanson and Wiedersheim-Paul, 1975; Johanson and Vahlne 1977), resource based theory (Madhok 1997), transaction cost and internalization theory (Williamson 1979, Anderson & Gatignon 1986, Hennart & Eapen 2001), different kinds of eclectic frameworks (Dunning 1988, Hill et. al 1990 and Kim & Hwang 1992) and bargaining power framework (Gomes-Gasseres 1989 and 1990, Ramamurti 2001). Each of the frameworks has also received criticism and their usefulness to explain the entry mode choice has been discussed in the literature (see Anderson 1997). So far the existing literature has not reached an agreement on which conceptual framework and constructs should be used to explain a firm's foreign market entry mode (ibid.).

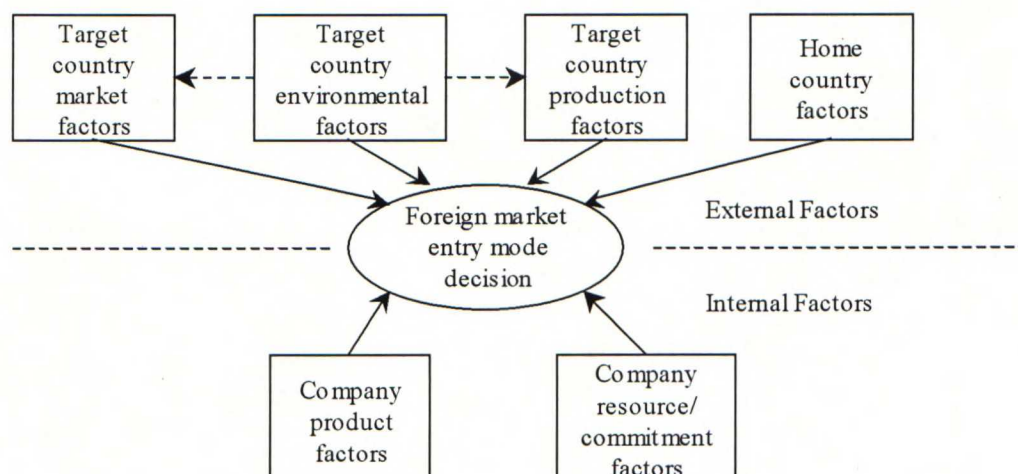
In this chapter, first the different factors affecting the entry mode choice and the most important differences between joint ventures and wholly owned subsidiaries are presented. Then, the different conceptual frameworks for entry mode selection are presented and discussed in chapters 3.2 (internationalization approach), 3.3 (transaction cost and organizational capability perspectives) and 3.4 (bargaining power framework).

3.1 FACTORS IN THE ENTRY MODE CHOICE

General Factors

A company's choice of its entry mode for a given target country is the result of several often conflicting forces. Root (1994, 28) divides these factors into *external* and *internal* factors (see Figure 2). External factors are market, production and environmental factors in both the target and home countries that cannot be affected by management decision. These include e.g. size of the target market, competitive structure, marketing infrastructure, production costs, government policies and regulations, cultural distance and smallness of the home market. The internal factors include product characteristics (e.g. how differentiated and technology-intensive the products are, need for service and possible need for adaptation) and company's resource and commitment factors, i.e. company's resources in management, capital, technology and production and marketing skills, and its willingness to commit these resources to foreign market development. (Root 1994)

Figure 3-2: Factors in the Entry Mode Decision



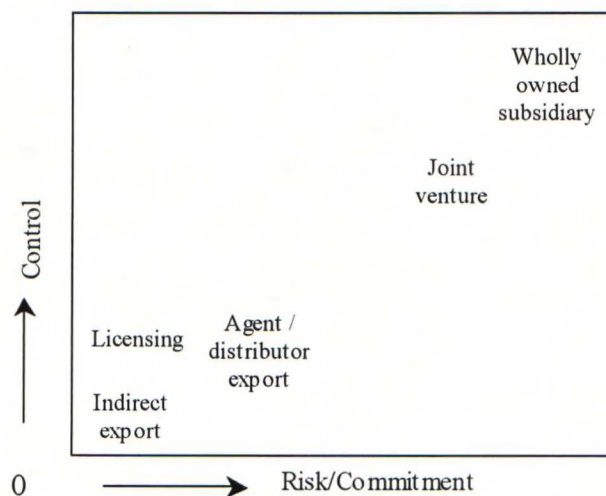
Source: Root (1994, 29)

Control versus the Cost of Resource Commitments

Normative decision theory suggests that the choice of a foreign market entry mode should be based on trade-offs between risks and returns. However, behavioural evidence indicates that a firm's choices may also be determined by resource availability and need for control. (Agarwal and Ramaswami, 1992)

Foreign entry mode choices are often viewed as trade-offs between control and the cost of resource commitments (see Figure 2-3), often under conditions of considerable risk and uncertainty (Anderson and Gatignon 1986). Control refers to a firm's need to influence systems, methods, and decisions in the foreign market. Control is desirable to improve a firm's competitive position and maximize the returns on its assets and skills. Yet control, while obviously desirable, carries a high price. To take control, a firm must take responsibility for decision-making, which it may be unwilling or unable to carry out in an uncertain foreign environment. Furthermore, control requires commitment of resources, which increases overhead cost and decreases the firms' flexibility to change its operation mode if needed.

Figure 3-3: Control vs. Risk/Commitment



Adapted from Root (1994, 39)

Wholly Owned Subsidiaries as Compared to Joint Ventures

What are the key differences between wholly owned subsidiaries and joint ventures, and what kind of effects do they have on the operation of the unit? In this chapter I will briefly describe the advantages and disadvantages of the joint venture mode as compared to wholly owned units to understand the most important factors involved in the entry mode decisions.

Harrigan (1985, 27-41) divides the different possible motivations for joint venture formation into three groups: internal uses, competitive uses and strategic uses. By internal uses Harrigan means ways of creating internal strengths in the firm. Joint ventures can be used to aggregate and share resources, and share costs and risks. Moreover, a joint venture can be way to obtain resources that are not for sale (for example technology or distribution networks). Competitive uses are ways to strengthen the current strategic position of the company, for example by gaining competitive advantages through faster market entry or influencing the industry structure evolution in a favourable manner. In Harrigan's studies strategic uses include creation and exploitation of synergies, technology transfer and diversification.

Luostarinen and Welch (1990, 159-160) present the following advantages of joint ventures:

1. Saving of capital. The amount of capital needed to operations is reduced by joint ventures as investments are shared by the partners.
2. Reduction of risks. Large political or commercial risks may dissuade the firm from acting on a solo basis, a joint venture being the only possibility considered seriously: host country officials are not as eager to nationalize or to confiscate the firm if it is partly owned by locals especially if linked to the government in some form.
3. National Image. Specially in a distant culture partial local ownership may eliminate local suspicions, "open doors" and facilitate in getting government orders, especially in a country with strong national feelings and/or long cultural distance from the investor's country,
4. Local knowledge and experience. Local participation may improve operations due to better knowledge of markets, habits, language, local management style etc. Local partner may also provide access to distribution networks and other resources.

As described above, joint ventures provide significant benefits for both partners. But there are also significant risks and problems involved. According to Beamish and Reynolds (in Datta, 1988, 78-90) the failure rate of joint ventures is as high as 45-50%, especially in less

developed countries such as China. It is often argued that a joint venture is only the second best alternative to a wholly owned subsidiary (Root 1994, 172).

JVs often suffer from rigidity in their management. At the starting point some assumptions and plans are made but when the environment changes it is difficult for the JV to adapt to these changes because of joint control and often differing objectives of the partners. Sovereignty conflicts originating from different objectives of the partner, loss of autonomy in strategy implementation and loss of control of the strategic resources transferred to the JV may cause frustration and affect the performance and management of the venture. These problems may also often be due to the partners' inexperience in cooperative operations, which leads to poor management of the JV (Harrigan, 1985, 36-40).

Luostarinen and Welch (1990, 160-161) list among others the following disadvantages of joint ventures:

1. Different objectives of the partners.
2. Profits may be smaller because part of them are distributed to partners and the performance of the venture may be weaker if the partners are not able to cooperate properly.
3. Problems in purchasing and personnel policies.
4. Political problems. The local partner's political connections may cause difficulties.
5. Financing problems. The local partner is often not interested in making new investments and the partners may not agree on whether profits should be invested or pocketed.
6. Dead-end street problems in decision making where the partners are not able to agree.

3.2 INTERNATIONALIZATION MODEL

The stages model of internationalization has been developed mainly by the Scandinavian researchers: Luostarinen (1979), Johanson and Wiedersheim-Paul (1970 and 1975) and Johanson and Vahlne (1977 and 1990). The basic thesis of all these studies is that internationalization is essentially a path-dependent incremental process where the pattern of international involvement of a firm is a function of its past international experience. According to the stage theories investors increase their investment commitments to foreign countries incrementally, advancing from a) no regular export; b) export via independent representatives

or agents; c) sales subsidiaries; and d) production plants, as they gain accumulated knowledge and experience in the host market.

Although not explicitly stated, the internationalization model of Johanson and Vahlne (1977) rests on the resource-based theory (Andersen 1997). A basic assumption in these models is that lack of knowledge is an obstacle to the development of international operations that can be overcome through experience over time. Thus the existing stock of firm's resources and capabilities both direct and limit its strategic evaluation of a particular market entry (Johansson and Vahlne 1977, Luostarinen 1979). Luostarinen (1979, 50-63) also underlines the influential role of lateral rigidity in the decision process, meaning that the entry mode choice is confined by the limited perception of alternatives and selective search.

Luostarinen (1979, 109-112, 182) further elaborates his internationalization model by identifying four categories of various types of outward international operations according to combination of functional and investment classifications. Direct investment is here separated into two categories: namely, into direct investment marketing operations (DIMOs) and direct investment production operations (DIPOs). However, the different ownership arrangements (wholly owned or joint venture) are not discussed.

Although the stages model of internationalization does not explicitly focus on the choice between a joint venture and wholly owned mode, its contribution to the framework of this study is the understanding that the entry mode choice is affected by the company's earlier international and host country experimental knowledge, and the lateral rigidity in the decision process. Further, the logic would imply that less investment demanding joint ventures would be selected before direct investment based wholly owned mode.

3.3 TRANSACTION COST AND ORGANIZATIONAL CAPABILITY APPROACHES

3.3.1 Transaction Cost Approach

The transaction cost approach (TCA) has been fairly commonly utilized in the entry mode research. The transaction cost approach describes cross-border activities according to the

economic rationale that firms choose the entry mode, which involves lowest cost (or highest risk-adjusted rate of return) associated with the transactions in the entire value chain.

According to the TCA, asset specificity (the degree to which assets are specialized to support trade for only a few parties), external and internal uncertainty, and the frequency of transactions represent the core dimensions of the transaction (Anderson and Gatignon, 1986). The composition of these dimensions is decisive for the way cost efficient governance modes are assigned to the transaction (Williamson, 1979). The decision maker is assumed to act under bounded rationality and sometimes display opportunistic behaviour. The transaction cost approach emphasized the importance of firm and industry specific factors but also recognized that certain country specific factors influence these costs.

From transaction cost perspective the choice between a JV and a WOS is a trade-off between the costs of using market or internal channels for transferring organizational capabilities. As an example, a firm could get the needed local expertise either by hiring the services of a local firm (e.g., to supply market research and represent the foreign firm in negotiations with the local government), or by forming a joint venture with a local firm. In the first case it would be acquiring an organizational capability by using the market; in the second it would be using an internal channel, because the capabilities would be transferred from a party with an ownership share in the venture.

The TCA predicts that a firm with high *asset specificity* prefer high-control (wholly owned subsidiary) modes. The internalization perspective reasons that market mechanisms for the transfer of know-how fail when the know-how is of a *tacit nature*. (Anderson and Gatignon, 1986)

The *external uncertainty* is considered as conditions that make optimal contracting unrealistic. Thus, when faced with external uncertainty, opportunistic behaviour of partner, and asset specificity, firms are better off internalizing the transaction by a subsidiary. (Anderson and Gatignon, 1986)

3.3.2 The Role of Locally Held Assets

Recently Hennart and Eapen (2001) pointed out an important shortcoming in the transaction cost approach (TCA) based entry mode literature concerning the role of locally held assets in

the entry mode decision. According to Hennart and Eapen (2001) the entry mode choice has been explained only by studying the asset characteristics of the MNE seeking to enter a foreign market, while the role of the locally held assets has been ignored.

The 'bundling theory' of Hennart and Eapen (2001) commences from the notion that production and distribution of a product in a foreign market requires the bundling of a number of resources, which in some cases may be separately held. An MNE seeking penetration into a foreign market typically holds assets such as product know-how and a strong and popular trademark, while parties in the local market possess complementary assets such as knowledge of the local markets and access to raw materials and existing distribution networks.

The separately held assets have to be bundled together to enable products' production and sale. This can be done through a licensing, a joint venture or a wholly owned subsidiary. The factors that determine the bundling mode are (Hennart and Eapen, 2001):

- 1) The relative importance of the locally held complementary assets to the MNE (and vice versa)
- 2) The transaction properties of these assets, i.e. how tradable they are

And consequently, the mode of entry is determined jointly by the TC characteristics of the MNE-held and locally held assets that need to be bundled together (see Figure 3-4 below), the most favourable bundle being the one with the lowest transaction costs.

Figure 3-4: Bundling Framework

		MNE held assets	
		Hard to sell	Easy to sell
Locally held assets	Hard to sell	Joint venture between MNE and local firm	Locally owned firm licencing form MNE
	Easy to sell	MNE wholly owned subsidiary	

Adapted from Hennart and Eapen (2001)

Thus, considering the wholly owned subsidiary mode, the bundling theory predicts that a firm will prefer a wholly owned mode when the locally owned assets (e.g. local know how, access to distribution networks and raw material and production facilities) are available to purchase with a low transaction cost (for example, when the firm can easily acquire local knowledge by hiring local managers). Or, the firm does not consider the local assets to be important to its operations (for example, when the firm decides to run the operations “its own way” regardless of the local habits, and it produces only for export, so there is no need for local market knowledge).

3.3.3 Dunning’s OLI – Paradigm

Building on the transaction cost view, Dunning’s (1988) OLI-paradigm a.k.a. eclectic framework integrates several strands of international business theories on cross-border business activities. While transaction cost approach mostly concentrates on firm and industry specific factors Dunning’s eclectic framework clearly emphasizes also the value of country-specific factors.

Dunning (1988) suggests that the following factors will influence a firm’s choice of entry mode:

1) *Ownership advantages* refer to a company’s possession of superior assets and skills with respect to other firms, especially those of the host country. To compete with host country firms

in their own markets, firms must possess superior assets and skills that can earn economic rents that are high enough to counter the higher cost of serving these markets. The ownership advantages include for example company size, multinational experience and company's ability to develop differentiated products. According to Pan (1996, 3) in general, a firm will prefer to adopt a wholly owned operation or acquire a majority ownership in an overseas JV in order to protect and fully exploit its ownership advantages.

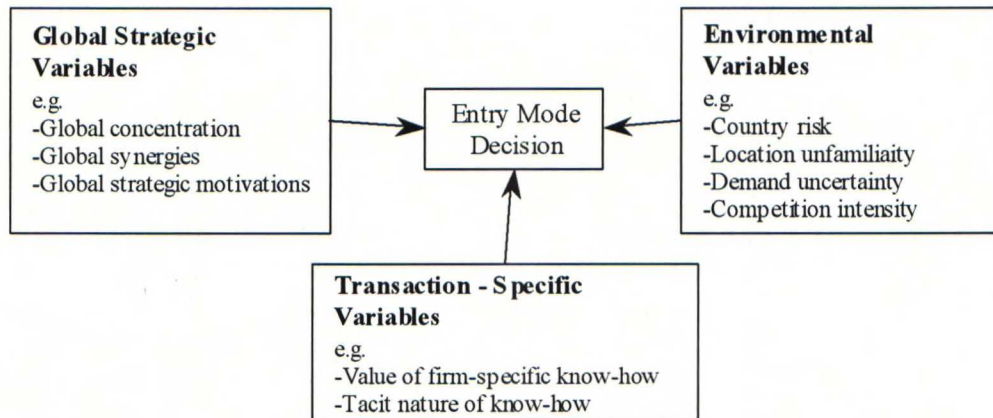
3) *Locational advantages* reflect how attractive the specific country is. These locational advantages include e.g. country risks, market potential, location familiarity and host country government's incentives or restrictions.

2) *Internalization advantages* are concerned with the costs of choosing a hierarchical mode of operation over external mode. This is uniform with the discussion in the transaction cost approach on using market or internal channels for transferring organizational capabilities. Joint ventures and wholly owned operations differ in the concept of internalization in a sense that in a joint venture a firm does not fully internalize the production overseas. Instead, the firm shares the ownership and the control of the venture with a local partner.

3.3.4 Entry Mode Choice as a Part of MNC's Global Strategy

Dunning's eclectic framework has been further developed by Hill et al. (1990) and Kim and Hwang (1992). They emphasize the importance of global strategic considerations in choosing multinationals' entry mode. While the existing studies until then had already identified numerous variables that influence the entry mode decision, according to Kim and Hwang those variables could be collapsed into one of two categories: *environmental* or *transaction-specific factors*. Furthermore, common to these studies was an underlying assumption that each entry decision is made *in isolation* and is driven essentially by efficiency considerations at the level of the individual entrant or subsidiary. Kim and Hwang (1992) introduce a third group of factors – *global strategic considerations* (global concentration, global strategic motivations and global synergies).

Figure 3-5: Kim & Hwang's Eclectic Framework



Source: Kim and Hwang (1992)

The theoretical background to this can be traced back to the work of Perlmutter (1969) that acknowledged the increasing existence of geometric approaches to multinational management, where the subsidiary units are not seen as portfolio of independent units but as an interdependent network. Thus, according to Kim and Hwang (1992) multinationals do/should not make their entry mode decisions in isolation, but to consider the interdependencies across the company units and countries, and the global strategy.

Gomes-Casseres (1989) found that firms with more localized strategies had a preference for joint ventures while firms pursuing a global strategy (measured by the percentage of intra-system sales to total sales) had a preference for subsidiaries over joint ventures. Kim and Hwang's (1992) study showed similar tendencies.

3.3.5 Organizational Capability Perspective

While the transaction cost/internalization perspective analyses entry mode choice on the basis of transaction costs minimization, the organizational capability (OC) perspective concentrates on the value of firm's capabilities. The OC perspective is based on the resource-based theory (Penrose, 1959) and shares the emphasis on the experimental knowledge as noted by Luostarinen (1979) and Johansson and Vahlne (1977). The organizational capability (OC) perspective perceives the firm as a bundle of relatively static and transferable resources, which are then transformed into capabilities through dynamic and interactive firm-specific processes where individual skills, organization and technology are inextricably woven together (Madhok, 1997).

Intangible resources such as skills and competencies (i.e. know how) can be viewed as composed of an embedded and a generic (non-embedded) component. Madhok (1997) proposes that firms with a high embedded-to-generic know how ratio tend to have greater preference for internalization, i.e. prefer wholly owned subsidiaries to joint operations. This idea is in accordance with the ownership advantage effect presented earlier in Dunning's eclectic framework.

Also market knowledge has both general (generic) and specific (embedded) components (Johanson and Vahlne, 1977). Here the OC perspective differs from the eclectic framework. Whereas in Dunning's (1988) eclectic framework the location was treated as a source of locational advantages, Madhok (1997) sees the locational effects as difficulties in exploiting the firm's existing know how due to the differences in home and host country environments. Thus, according to Madhok (1997) when the embedded-to-generic ratio of market knowledge is high, firms will have greater preference for collaboration (i.e. joint operations).

Organizational Capabilities and Cultural Distance

How does national culture affect company's international entry mode selection? Does greater the socio-cultural distance between the home and host countries the lower the degree of control a firm should demand, or vice versa?

Empirical studies linking national cultural distance and entry mode selection have produced contradictory results. For instance, Shane (1994) and Anand and Delios (1997) found that large cultural distance was associated with high control (wholly owned) entry modes. In contrast, Kogut and Sign (1988), and Erramilli and Rao (1993) found cultural distance to be related to the use of shared-control (joint venture) modes of entry. And lastly, Erramilli (1996) and Gatignon and Anderson (1988) found no relationship between cultural distance and entry mode choice.

The view that firms prefer joint venture modes in culturally distant countries can be explained by investing firm's desire to speed the organizational learning process, increase local knowledge, and reduce uncertainty. Not knowing, being comfortable with or even agreeing with the values and operating methods of the host country, firms may shy away from high commitment and control. Here a joint venture serves the purpose of assigning management tasks to local partners who are better able to manage the local labour force and relationships with suppliers, buyers, and governments. Gatignon and Anderson (1988) state that "joint ventures with local investors may be seen as a way of bridging cultural gaps".

What would then explain that in some studies firms have been found to prefer own subsidiaries in environments that are culturally very different? According to Madhok (1997) in a situation of high socio-cultural distance, a partner's capabilities might be limited or routines substantially different due to the different work context, which would result in an inability to absorb and exploit the know-how efficiently. In other words, in a culturally distant environment a firm might see a substantial advantage in doing business its "own way", using its own operation procedures and methods regardless of those of the host country, and therefore prefer a wholly owned mode.

Furthermore, trying to explain the contradictory results of empirical studies Brouthers and Brouthers (2001) argued that firms prefer wholly owned mode in culturally distant countries if the country risk is high. They suggests that in culturally distant and high investment risk

countries firms react to uncertainty by exerting control to better manage their volatile affairs and resolve disputes, and therefore prefer high control modes.

3.4 BARGAINING POWER FRAMEWORK

The bargaining power framework for entry mode choice recognizes the importance of host government restrictions that limit equity held by a foreign firm, and suggests that a firm's options will be dependent on its negotiations with the host country government. Higher level of ownership is possible if the firm has superior bargaining power to the host government. On the other hand, a firm may be restricted to share ownership if the host government has better bargaining strength (Larimo, 1992, 2). According to Gomes-Casseres (1989, 2) the process by which an MNE chooses the ownership structure of a subsidiary can be divided into two stages: (1) *determination of the firm's preference* i.e. what ownership structure does the firm want; and (2) *entry negotiations with host governments* i.e. what ownership structure can the firm get.

According to Gomes-Casseres (1990, 4) it is important to recognize that ownership structure is not an all-important issue to firms, or to governments for that matter. Both parties might be willing to accept something less than their top ownership preference in return for gains on other issues. This brings us to the question of bargaining power between the parties. As an example, in a developing country where governments often prefer JVs to WOSs, the government might drop its insistence on a JV if the firm can contribute something significant (e.g. latest technology) to the development of the economy. Or the firm might settle for less than full ownership to gain access to a lucrative market.

According to Gomes-Casseres (1990, 4), as a result of the bargaining process, the ownership structure that the MNE actually ends up with is a function of: (1) the intensity to which it wants a certain ownership structure; and (2) its bargaining power relative to the government's. And as an end result, host government ownership restrictions and incentives can have two kinds of effects: (1) they may lead to the firm compromising for something else than its top ownership preference; or (2) they can deter the firm from investing at all.

Figure 3-6: Bargaining Power Framework of Entry Mode Choice



Recently Ramamurti (2001) argued for the obsolescence of the old bargaining power framework and presented a new ‘two-tier bargaining power model’. According to him MNC-host country relations can no longer be viewed as a static, two-party negotiation, but rather must be viewed as a dynamic, two tier multi-party bargaining process. Tier-1 bargaining occurs between host developing countries and home (industrialized) countries, and takes place bilaterally or through multilateral institutions like the IMF, the World Bank and the WTO. These negotiations produce *macro* rules or principles governing FDI, anchored in bilateral or multilateral agreements, which then constrain *micro* negotiations in tier-2 between individual MNCs and host governments.

Bargaining Power Framework and LDCs

According to Larimo (1992, 2) the bargaining power approach applies well to FDIs made in less developed countries (LDCs), because the role of government concerning FDI is usually much greater in these countries. Empirical studies, focusing on the ownership arrangements of FDIs undertaken in *developed countries*, indicate that investors have preferred wholly owned subsidiaries to joint ventures (Larimo and Mäkelä 1995). The findings of these studies contrast sharply with those concerning the behaviour of investors in *developing countries*. In most of the studies focusing on LDC investments, joint venture has been identified as the predominant ownership arrangement. (Larimo and Mäkelä 1995)

In developing countries like China the host country government plays an important role in regulating foreign investments and have their own motivations and objectives. These can be for example increased local employment, import substitution, saving of foreign exchange, technology transfer, minimization of foreign control in the local economy and protection of

domestic industries. And therefore governments often try to affect FDI through restrictions and incentives.

According to Larimo and Mäkelä (1995, 27) in developing countries JV ownership arrangements are mainly triggered by host government policies, though recently, as FDI restrictions have been liberalized in many developing countries, partner's knowledge of the local market, investment climate, business culture etc., has come to play a more central motive behind JVs in these countries. The change in governments' attitudes towards foreign investment is largely attributable to the growing recognition of the role of FDI in generating economic growth in developing countries. Thus, at least in some LDCs, the bargaining power approach has been losing its significance in explaining the determinants of the size of foreign ownership.

3.5 SUMMARY

The choice between different entry modes can be characterized as choosing between different levels of costs, resource commitments, control and risk. These are affected by both firm internal (e.g. resources and motives) and external (production and environmental factors) factors.

The internationalization model sees the entry mode choice as path-dependent - investors increase their investment commitments to foreign countries incrementally as they gain accumulated knowledge and experience in the host markets.

The transaction cost approach takes an economistic view to the entry mode choice, a rationale that firms choose the entry mode, which involves lowest cost associated with the transactions in the entire value chain. The research done based on the transaction cost theory suggests that a firm will choose a wholly owned subsidiary when the firm is large, when its assets are highly specific, when its know how is of tacit nature and when there is high external uncertainty. The organizational capability perspective emphasized the importance of company resources and know how as the decisive factors.

The key difference between internationalization model and transaction cost approach is how they stance toward uncertainty. According to internationalization model companies react to the

uncertainty of an unknown market by proceeding incrementally. Then again according to the transaction cost view companies react to uncertainty by seeking better control of the operations.

The bargaining power approach to entry mode choice emphasized the role that governments play in foreign investment decisions. The bargaining power view is useful especially in understanding the entry mode choices in developing countries.

Joint Venture or Wholly Owned Subsidiary?

What are then the critical factors when considering an entry mode choice between a wholly owned subsidiary and a joint venture? According to the literature reviewed, the advantages of joint ventures are mainly based on the opportunity to combine the material and human resources of the partners, in order to produce complementarity and, at best, also synergy. (Larimo and Mäkelä, 1995) "Among the most commonly cited reasons for taking a local partner are to obtain capital and vital raw materials, to spread the risks, to increase economies of scale, to gain a more rapid markets entry and a local image, as well as to acquire knowledge of the local economy, politics, customs, legislation etc. (Larimo and Mäkelä, 1995)" Also, host country specific know how is of special significance in LDCs, where the operating environment differs considerably from that of developed countries. The need for local know how is further accentuated if the foreign firm has no prior experience in operating in the country. (ibid.)

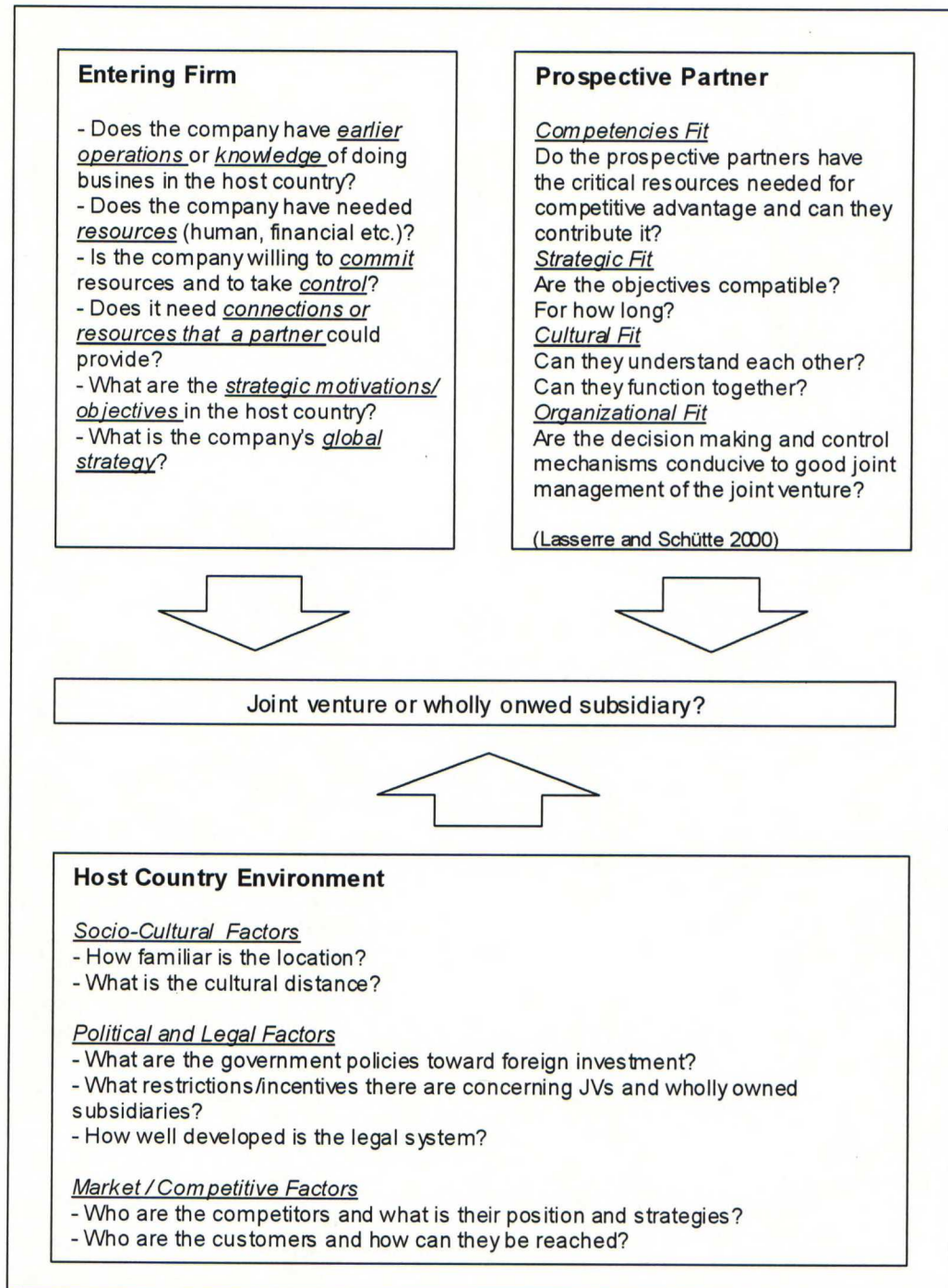
Compared to joint venture mode the most important advantages of wholly owned subsidiaries relate to full control of the operations. The company can operate its business independently and can implement whatever management system, and therefore enjoys higher flexibility and control. Further, the investing firm does not have to share secret technological or competitive information to a partner. The entry mode choice is also affected by the firm's global strategy. Often firms prefer wholly owned subsidiaries because they want to create a close global network of interdependent units. The important disadvantages of not having a local partner relate to local knowledge, connections to local business entities and authorities and national image that a local partner can provide. Furthermore, wholly owned subsidiaries require higher investments and are thus considered to have higher risk.

Theoretical Framework for the Study

The following theoretical framework is a collection of key factors affecting the decision between a JV and a wholly owned subsidiary mode. The framework combines ideas from the different theories discussed in this chapter. It emphasizes the investor's earlier experience and resources, but takes also into account their limitations. In addition, motivations and strategies play an important role. The prospective partner box asks the critical questions concerning the feasibility of the joint venture option.

There is a great number of host country environmental factors that influence the entry mode decisions of firms (see e.g. Root 1994). However, many of them, such as labour cost, are relevant only when choosing whether to invest in a certain country or not, but are not relevant when choosing between wholly owned and joint venture mode. In the framework below, only the factors that are most likely to have a significant effect on the "joint venture or wholly owned" -question have been listed. These are: 1) Socio-cultural factors; Especially, how familiar the company is with the host country? And whether the company reacts to cultural distance by finding a partner to provide local knowledge, or whether it seeks full control to avoid cross-cultural management problems. 2) Political and legal factors; i.e. what kind of laws, restrictions and incentives concern joint ventures and wholly owned subsidiaries. And 3) Market/Competitive factors. This last category covers a wide range of factors such as, who are the competitors and customers and what is the competitive structure.

Figure 3-7: Theoretical Framework - "Joint venture or wholly owned subsidiary?"



4 FOREIGN COMPANIES IN CHINA

This chapter attempts to answer the question of why the structure of FDI in China has changed dramatically over the past two decades. First, the role of Chinese government and its foreign investment policy is discussed in chapter 4.1. Then, chapter 4.2 continues by analyzing the challenges of the business environment in China, and its effects on the entry mode decisions of foreign companies.

4.1 THE ROLE OF GOVERNMENT

4.1.1 Development of FDI in China

In the turn of the 1980's Peoples Republic of China chose open door policy to develop its economy and industries by permitting foreign direct investment (FDI) into the country. The open door policy was adopted because the Chinese government believed it could acquire four items that the country desperately needed: capital, high technology, advanced management know-how and access to international markets.

The first step of the open door policy was the promulgation of the "Law on Joint Ventures Using Chinese and Foreign Investment" in 1979 that gave foreign companies a possibility to invest in China through Sino-foreign joint ventures. In addition, in 1979 China established four Special Economic Zones (SEZ) in the southern coastal provinces of Guangdong and Fujian, giving them autonomous power and privileges to attract foreign direct investment. In theory establishing wholly foreign owned enterprises became possible only in 1986 with the promulgation of "Law on Enterprises Operated Exclusively with Foreign Capital". However, in practice the Chinese official started to actively apply this law only in the early 1990s, and the rush of wholly owned subsidiaries started around 1993. (See Table 1-2 on page 9)

Since the opening, FDI into China has grown drastically (see Table 1-1 on page 5). The growth of FDI has been especially fast after 1991. By 1995 the inflow of FDI into China already ranked the second highest in the world, only behind the USA. In 1997 the inflow of FDI into China accounted \$45 billion, over half of the flows into Asia and 11 percent of the world total (Luo, 2001). In 2001,

During the past two decades the structure and modes of FDI into China have changed considerably. Firstly, several new investment vehicles such as umbrella companies,

acquisitions of Chinese enterprises, and build-operate-transfers have been created. Secondly, the use of the already existent entry modes is undergoing structural changes. Until quite recently the equity joint venture was the most common investment vehicle used by foreign investors. Between 1979 and June 2000, foreign companies entered into 201,848 EJV contracts. However, in the 1990's the share of WFOEs has been increasing considerably. While in 1990 only 12% of all foreign-funded enterprises approved up to then were WFOEs, in 1997, WFOEs surpassed equity joint ventures as the most popular foreign investment vehicle (see Table 1-2 on page 9). (Sutter, 2000) In 2001 around 60% of all new foreign invested enterprises were WFOEs (China Statistical Abstract 2001).

4.1.2 The Chinese Government Policy on FDI

The FDI policy of the Chinese government has been one of the most important reasons why the JV long dominated foreign direct investment. Although it has from a legal perspective been possible to establish WFOEs already from 1986, for a long time the Chinese government very strongly favoured JVs. Especially in the beginning WFOEs were not given a high priority in China, which has sought to limit the invasion of foreigners in terms of control. According to Behrman (et al. 1991, 52-53) the tendency to limit WFOEs was motivated by China's desire to understand their benefits and disadvantages before a significant number of WFOEs were established. JVs were seen as more favourable because the Chinese officials believed that joint ventures offered a better structure to transfer technology and management know-how to China. Thus, the use of WFOEs used to be limited more or less to situations in which the technology desired was significant or a large part of the output of the company was to be exported. Still in the late 90s the regulations required that 50% of WFOEs production had to be exported and that the WFOEs had to be "high-technology" companies, a status that was granted by special scientific review boards.

The Chinese government did not earlier only restrict the use of WFOEs but also gave preferential treatment for JVs. Until July 1991, equity joint ventures received a favourable tax treatment as compared to WFOEs. The taxation of the different forms of enterprises was so different, that for tax reasons alone, equity joint ventures became the favoured vehicle for investment. Since 1994 the tax treatment of these forms of investment has been virtually equal. (Zee and Ho, 1994) Earlier WFOEs also faced more stringent foreign exchange rules, but nowadays WFOEs and JVs operate under similar foreign-exchange rules and comparable import and export regulations for licensing, quotas and duties (Vanhonacker, 1997, 130). Also,

the legislation governing joint ventures in China was for a long time much more comprehensive and official interpretations were more predictable than is in the case of WFOEs.

As China's experience with foreign investment increased, the Chinese learned that JVs restrict investment by some companies because of corporate policy; they learned also that WFOEs employ Chinese, who will become technically trained and experienced in management know-how. Consequently, Chinese government and authorities became more open to WFOEs. Furthermore, the WFOE has also proven to be an ideal structure in the tight credit market of recent years, in which Chinese partners have been unable to contribute the necessary start up or expansion capital (Sutter, 2000).

Restrictions Still Occur

However, foreign investment is still very much regulated in China. Investment is still officially directed by the *Catalogue Guiding Foreign Investment in Industry* (see Appendix 3), which designates investment in particular sectors as "encouraged," "permitted," "discouraged," or "prohibited." Restrictions exist often because of national security reasons or need to protect the domestic industry. (Sutter, 2000). Equity and geographic restrictions still exist in many sectors, particularly in services, in so-called "pillar industries" of Chinese economic development, like aviation, autos, and chemicals, and in sensitive areas like publishing and broadcasting. In these industries foreign investment is usually allowed only through JVs.

Then again, the regulatory environment in China is still evolving with more sectors opening up for foreign investment. In addition to opening new industries to foreign investment the PRC government has also offered more investment options in recent years, and have become more willing to approve vehicles that foreign investors prefer, especially the wholly foreign-owned enterprise.

Also, according to Vanhonacker (1997) Chinese officials are nowadays far more concerned about *what* outsider investors bring to the country in terms of jobs, technology and foreign exchange, than *how* their deals are structured. Vanhonacker argues that more important than the regulations themselves are the principles that underlie them. China wants and needs foreign investors, and if they can offer something of value to China all regulations and form of the investment are largely negotiable. This suggests that one important factor when choosing an operation mode in China is the bargaining power that the foreign investor has; e.g. advanced

technology. When negotiating with the local authorities e.g. large high technology companies can perhaps to a large degree dictate the terms of the investment.

In short, although it has from a legal perspective been possible to establish WFOEs already from 1986, the Chinese government has very strongly favoured JVs. Also, earlier foreign investors have perhaps opted for JVs because; in general there were little experience on how WFOEs would function in practice and how they would be treated by the local authorities.

4.1.3 The WTO

In the late 2001 after 15 years of negotiations China was accepted as a member of the World Trade Organization (WTO). While China's WTO membership will have the strongest effect on agriculture and automobile industry, it will touch all business in China, at least indirectly. Most foreign companies expect competition in the Chinese market to increase, and hope that China manages to bring its investment and business laws in line with international practices. This would decrease the risk of doing business in China and make the administrative matters easier. (Kaislaniemi 2002)

China's WTO accession will affect wholly foreign owned companies mainly in two ways. Firstly, China's accession to the WTO will decrease customs duties immediately. The duties on the 150 most important EU products will decrease from 18,9 % to 10,8 %. These will be implemented product category by product category by year 2006. For example, considering the important Finnish industries, the duties on paper, cardboard and wood product will decrease from 12-25% to 5-7,5%. The duties on telecommunication products will decrease to zero. (Talouselämä 9.3.2001) This will decrease the cost of importing, and naturally also increase competition in the Chinese market.

Secondly, the anticipated new legislation should benefit wholly foreign owned enterprises significantly. For example, within three years of accession, WFOEs should gain distribution rights, including the ability to provide after-sales service, warehousing, transportation, and logistics services. (Sutter, 2000) (see also Zeng 2002) The anticipated trading right law will allow foreign companies to engage in importing activities. So far WFOEs have been allowed to sell only products produced in China and to import only components for their own production. For import of other products companies have been forced to use the services of licensed state-owned export-import companies. However, exactly how and when these WTO commitments

are incorporated into Chinese legislation and how they will be implemented by officials is not sure.

According to Sutter (2000) China's entry into the WTO will bring important new opportunities to foreign firms in the PRC, but will not bring great changes for investment structure options in China.

"China's need to bring its investment and business laws in line with international practices, and satisfy investors' growing demands, will push PRC officials to continue tinkering with existing vehicles and introduce new structures. It is unlikely, however, that the changes will be rapid or deep enough to meet these demands completely. In the meantime, foreign investors will continue to push against the ceilings of the old JV and WFOE frameworks, and experiment with the newer, less clearly defined options". (Sutter, 2000)

4.2 THE BUSINESS ENVIRONMENT IN CHINA

To describe China as a business environment Björkman (2002) gives a list of paradoxes: China is poor, but home to some of the world's largest markets, it is backward, but technologically quite advanced and some surprisingly strong local companies are emerging, and it is communist, but has also extremely competitive markets. According to Björkman (2002) foreign companies are interested in China because (1) although poor, it is potentially huge local market, (2) China is an important sourcing platform with "relatively inexpensive, huge pool of smart, ambitious people many of which have an acceptable secondary and technical education, and acceptable perceived political stability" (ibid.), and (3) because of China's future regional and global role.

'All you hear about China may be true but none of it is reliable'

(John Frankenstein – China Business Review)

Björkman (2002) also points out that while still ten twenty years ago foreign companies entering China could find an untouched market and benefit from the first-mover advantage, nowadays "everybody is already there". In addition to increasing numbers of foreign companies nowadays there are also surprisingly strong local players, especially when

technology is relatively mature, stable and widely available. Many industries are plagued by over-capacity, price war, and low efficiency. Currently the local firms in China are still concentrating on volume but are moving towards higher quality and value products. The foreign firms focus on premium segments. (ibid.)

Although the government still interferes and regulates business in many ways, China is nowadays extremely competitive and tough market. Foreign direct investors' also have to get used to the fact that imitation of products is the rule and IPR-problems are common. High employee turnover is also a problems in many companies: qualified managerial staff is expensive, hard to find and hard to keep. In addition, the significant tax holidays and other incentives that investors got still in the investment boom years of the mid-1990s foreign are now expiring (Sutter 2000).

The huge size of the country raise a question whether China should be viewed as a single market. There are huge economic and cultural differences between provinces, and for many products the market is regionally very fragmented. The break-down of the old systems of state-owned companies and planned economy has left the distribution very fragmented and unprofessional. (Lasserre and Schütte 2000)

Considering the semi-closed and semi-planned economy of China, various regulations, local market protectionism, and business network are daunting barriers to foreign MNCs. "In addition, unique local cultural and consumption behaviours are new challenges to get to local customers. All this points to the need of partnership from appropriate local businesses." (Pan and Chi, 1997) Why are foreign companies then shying away from joint ventures in China?

4.2.1 The Problems with Joint Ventures in China

As described in chapter 2, the joint venture mode provides significant benefits for both partners, but also significant risks and problems emerge. The problems of Sino-foreign joint ventures are well known and have been studied widely (see e.g. Hamill & Pamblos 1996, Wong et al. 1999, Beamish 1993, Shenkar 1990). Wong et al. (1999) list the most common problems with JVs in China as following: Human resource problems such as nepotism, overstaffing, employees' loyalty to Chinese partner; operational problems such as quality control, different management approaches and working methods; and partner related problems such as Chinese partners' reluctance to change, political agenda and slowness of decision

making. In addition to different objectives, numerous cultural differences and different approaches to business, even simple issues like lack of basic language skills often make cooperation between the Chinese and western companies difficult.

Björkman (2002) lists the following common disappointment with Chinese joint venture partners:

- Limited guanxi (connections) outside local base, primarily used for own interests
- Distribution based on old system, weak outside own base
- Very tight financial situation
- Short-term orientation
- IPR-problems
- Difficult to take over existing operation: technology, corporate culture
- Sometimes bad reputation
- Lack of fit in terms of competencies, strategy, culture & organization

According to Pan et al. (1995, 126) foreign managers are generally dissatisfied with the performance of their joint ventures in China. Many joint ventures in China were maybe also doomed to failure from the beginning. According to Hanes (1998) as western investors rushed into the Chinese market in the 80s and early 90s many joint ventures were formed through “shotgun weddings”, with unknown partners, sometimes with natural competitors, and without clear plans of how the venture would operate.

Different Objectives

Problems arising from the different objectives of the partners are common in JVs. According to Datta (1988, 78-90) in JVs the objectives and motives of the local partner often differ significantly from the ones of the foreign partner. Local partners, especially in developing countries, usually aim at obtaining modern western technology, management know-how, brand names and trademarks. These features then facilitate corporate modernization, growth, domestic sales and exports. The foreign partner on the other hand, often sees joint venture as a vehicle for entering a new market where other operation modes may be less favourable due to local legislation or significant political or economic risks.

In sino-foreign JVs the Chinese partner's aim is often to obtain advanced technology and to promote exports, while the foreign partner may wish to achieve lower production costs or to

enter China's domestic market (Martinson and Tseng 1995, Hamill and Pamblos 1996). According to Vanhonacker (1997, 135) it is also now widely acknowledged that most Chinese companies seek profits on a much shorter time horizon than foreign investors. According to Hanes (1998) Chinese partners are accused of looking for immediate profits, then pocketing the returns. Foreign partners are said to be obsessed with market share, insisting on reinvesting profits to boost size.

To better control the operations of their JVs and decrease the problems deriving from shared management foreign investors in China often prefer to hold majority share in joint ventures. However, contrary to popular belief, equity stake does not necessarily equal managerial control. According to Article 26 of the joint venture law, JVs must obtain the unanimous consent of the board of directors on most major investment decisions (Sutter 2000). Thus, little can be accomplished without the support of the joint venture partner.

Protecting Technology and Know How

Another issue that strongly supports choosing WFOE instead of JV is the possibility of technology leakage. This is perhaps the grayest of the gray areas of doing business in China. One of the reasons why China opened its borders for foreign investors was to acquire knowledge in latest technologies. In most of the Sino-foreign JVs the foreign partner provides the technology for the venture. Chinese companies, naturally, want as much information as possible. Foreign investors, however, are reluctant to give away advanced, proprietary technology for fear that it will be copied - especially in the light of China's spotty enforcement of intellectual property rights. There are several examples of joint venture partners starting to use the acquired technology for their own purposes and competing with the joint venture. Moreover, if the joint venture is dissolved, preventing the Chinese partner from continuing to use foreign know-how against the will of the foreign investor can be difficult under current conditions (Tao, 1998). Therefore it is not surprising that most investments that involve secret formulas and processes take the form of WFOEs (Sutter, 2000).

Although the problems of Sino-foreign joint ventures are well known and real, a JV offers several potential benefits that should not be forgotten, the most important being the use of the local partner's marketing and distribution networks. A JV can also benefit from any government connections the local partner may have. For capital-intensive projects, a JV is often a lower-cost alternative to a WFOE greenfield project, because the Chinese partner's

capital contribution often takes the form of land and existing facilities. In addition, because the Chinese government still to some extent favours JVs, a foreign partner can often negotiate preferential terms in return for transfer of technology and expertise. These terms may include special access to, and rates for, utilities and inputs. (Sutter, 2000)

4.2.2 Guanxi

"It is a fool who does not hire a guide when entering a foreign land"

Chinese proverb

The Chinese word 'guanxi' means 'relations', or 'networks' in business world. These informal social networks are developed through natural relationships such as family, marriage, schooling and work. The significance of personal relationships is emphasized in Chinese society and is traditionally extremely important in all aspects of life from family relations to business and politics. Doing business in China one soon learns that doing business without guanxi is extremely difficult, and that restrictions are usually not absolute as the Chinese are accustomed to solving the most impossible problems by drawing on their connections. Businesses with connections, especially at various levels of government, have good access to people and resources that can enhance their ability to get things done. But for foreign firms new to China, this can be a challenge.

Acquiring the needed guanxi and knowledge of the local markets has been stated as one of the most important reasons for foreign companies entering China through JVs instead of WFOEs. According to Neubel (1994) WFOEs seem to be voluntarily avoided by foreign investors since they suffer from the drawback of lacking the direct linkages to the domestic economic system provided by the Chinese partners in joint ventures. WFOEs are therefore perhaps the most suitable for those companies with readily formed contacts and long experience of China's vastly different culture, language, business climate, and political environment.

It is clear that relations are of utmost importance in China, but how useful are JVs partner in providing the necessary connections? It is generally agreed that a good joint venture partner is extremely valuable, but on the other hand, for example Vanhonacker (1997, 135) argues that more and more foreign companies are finding that the scope of their Chinese partners guanxi is limited, may take them in directions that are difficult to control or may not be strategically

useful. In addition, some companies are finding guanxi may not be cost effective, i.e. a company may achieve its goals cheaper through official bureaucracy than through relations.

Considering the WFOE as an operation mode raises the issue of guanxi. Can foreign investors successfully make the necessary political, business and social connections themselves? According to Vanhonacker (1997, 136) the answer is no. However, he says that some foreign investors are relying more and more on agreements with Chinese agents to make liaisons on their behalf and to help procure land, materials and services for them. These companies identify exactly which connections will help and who has them, and then engage the Chinese individuals, companies, or organizations with access to the decision-making authorities as “advisers” on short-term contracts.

Foreign firms can also try to acquire the needed guanxi by hiring managers that already have connections with important local officials. For example, according to Bruton et al. (2000) in some cities in coastal China advertisements for new employees openly state that preferred candidates should have good relationships with certain government departments and officials. In this way, over time foreign companies will gradually build their own network of connections.

4.2.3 Strategic Considerations

Joint ventures as an investment form also pose serious difficulties for the future expansion of the company inside China. According to Vanhonacker (1997, 132) the problem is that China’s planned economic system, which was in operation until 1979, created an enormously fragmented industrial environment. Companies were required to make a narrow line of products or to operate in a geographically restricted market. Still today, very few Chinese companies have a national presence, and those that do, have already been cherry-picked by early foreign entrants looking for a JV partner. In other words, the prospects of finding a Chinese JV partner that can bring national scope to business are poor. Moreover, according to Vanhonacker (1997, 132) every Chinese company belongs to and operates under some combination of local, provincial and central government authority, each with its own agenda. Borders between the authorities are sharply drawn, and many of them compete with one another for resources and regulatory protection. Thus, if a Chinese company tries to do business outside its authorized territory it is apt to run into trouble.

Many multinationals have therefore entered China by establishing several JVs in the major regions of the country. However, many of the companies are now struggling with the problem of how to integrate their operations in China; for example, how to combine the support functions, such as sales force, human resources department and finance operations of their separate JVs to reduce duplicate staff. Recently it has become possible to establish a holding company in China to group several operations under one roof. But folding several joint ventures into a holding company is not easy, since unanimous consent of each joint venture's board is required. It is much easier to set up a holding company if all the operating companies are wholly owned. (Business China, 1998, 1) Therefore, a MNE aiming for national presence in China should carefully consider what kind of market access and expansion potential its partner candidates have and whether entering China with a WFOE gives the company better expansion possibilities and more freedom in developing its operations.

Combining the JV and WFOE Modes

The answer to the question, JV or WFOE, does not necessary have to be an either-or decision. In addition to choosing between JV and WFOE, companies could also consider creative ways of combining the two operation modes. These can be referred to as hybrid company forms.

In his article Vanhonacker (1997, 140) gives three such examples. One option is to have a silent JV partner with minority stake in the company. In other words the company would be a JV on paper and it could enjoy the benefits that are given to JVs, but still in practice it could be operated like a WFOE. With minimum involved of the Chinese partner in the everyday management, many of the typical JV managerial problems can be avoided. According to Vanhonacker (1997, 140) many Sino-foreign JVs are moving into that direction when the foreign partners are increasing their share of ownership in the JVs.

Another way is to establish a WFOE for production purposes and a marketing JV to get access to local distribution networks and benefit from the partners knowledge in local markets. A third alternative is to establish a JV that after a fixed period of time can be turned in to a WFOE. When negotiating the JV contract the option for the foreign partner to buy the Chinese partner out after a certain period of time is included in the termination clause. This is a good alternative if the value added of the Chinese partner is significant in the early stages of the venture. (Vanhonacker 1997, 140)

4.3 DISCUSSION

The Era of Joint Ventures

The most important reason for the popularity of JV as an investment mode before the mid 1990's was the restrictions and incentives of the Chinese government. When China in the early 1980s opened to foreign investment western businesses became dazzled by the size of the Chinese markets. Especially in the beginning of the 1990's there was a rush of foreign companies to China as everyone wanted their share of this lucrative market. However, the Chinese government allowed foreign investment only through JVs. It seems that for many companies joint venture as an operation mode was not their own preference but rather a price for being able to do business in China.

The possibility to establish WFOEs became possible much later (legally in 1986, in practice in early 1990's), and even after that the WFOE option was highly restricted for a long time. In the beginning foreign investors also often opted for the JV mode because there was no experience of how WFOEs would function in practice and how they would be treated by the local authorities. Also, the need for local expertise and relations has driven foreign companies to establish JVs with local companies. However, in many cases Sino-foreign JVs have not lived up to the expectations of the foreign investors.

The Rise of Wholly Owned Subsidiaries

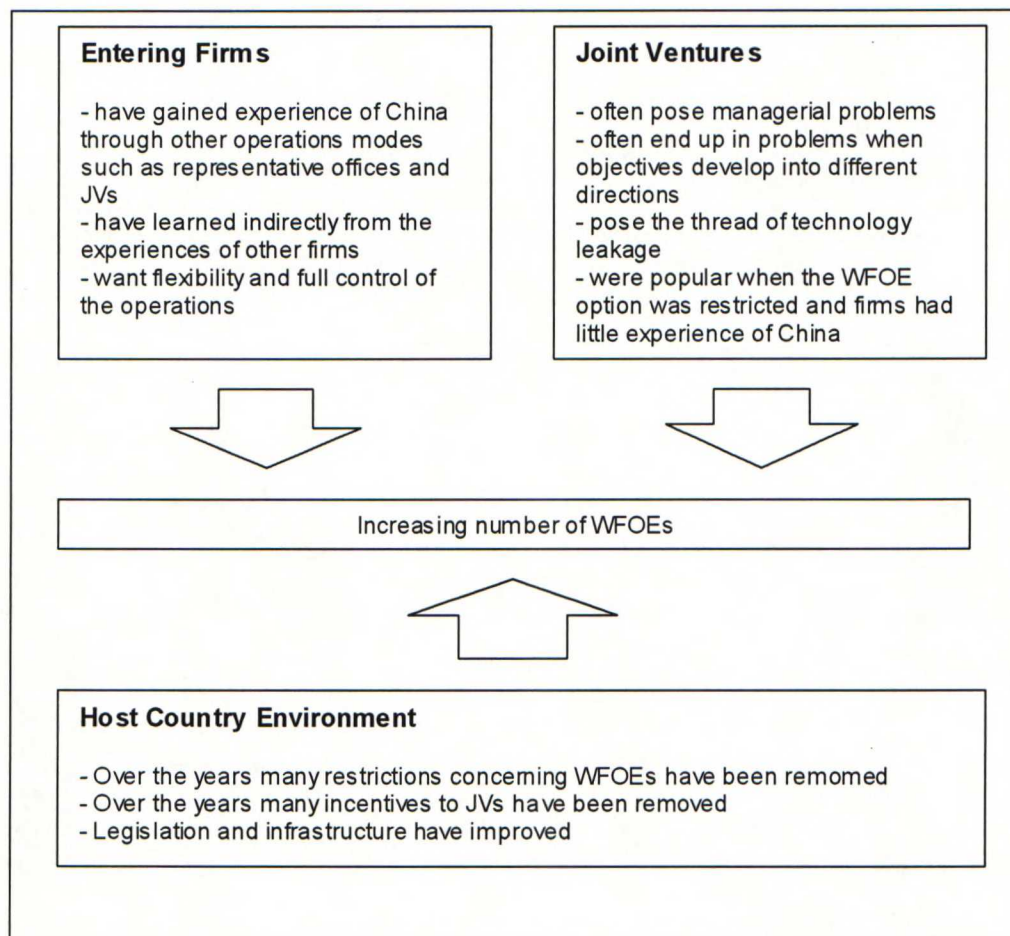
As FDI into China has increased significantly over the last two decades the attitudes of Chinese authorities have gradually become more open towards WFOEs, restrictions have been gradually removed and new industries have been opened for WFOEs. At the same time the legislation concerning FDI has been improved, which decreases ambiguity and the risk of investing. Over the years foreign companies have also gained more experience of the Chinese market and may have become more confident of entering the Chinese markets alone. Undoubtedly, WFOEs as an operation mode gives companies more flexibility and control in management.

Luo (2001) suggests that a major factor underlying the change is that an increasing number of pioneering investors already in China have employed wholly owned ventures as a form of reinvestment. It is also likely that those new investors who have gained experience and knowledge from early entrants will consider using wholly owned subsidiaries as an entry mode.

According to Luo (2001) those without experience, either direct or indirect, still need to opt for a joint venture.

Over the past two decades China has gone through major economic and political changes. “The Chinese have made great strides in adapting to the western mindset, and environment now exists in which foreign managers can realistically envision greater control over their Chinese operations and seriously consider the creation of a WFOE, a strategy previously not thought realistic” (Wong et al. 1999, 12). It looks certain that in the near future the share of WFOEs in China continues to increase and the Chinese government continues opening more industries for WFOEs. “However, China’s vastly different culture, language, business climate, and political environment is still a challenge for foreign companies, and thus for many companies the joint venture maybe still be the best way to acquire the necessary familiarity with China’s market conditions” (Wong et al. 1999, 12).

Figure 4-1: Summary: Why WFOEs have become more popular in China?



5 MULTIPLE CASE STUDIES ON FINNISH COMPANIES

At the moment some 160 Finnish companies do business in China. Finnish companies have around 60 production facilities in China, of which around one third are wholly owned subsidiaries and the rest are joint ventures. The first Finnish company that established a production facility in China was Valmet automation with its joint venture in Xian in 1989. The rush of Finnish companies into China started around 1993, however, these were still all either joint ventures or representative offices. The first Finnish wholly owned company, Neste Polyester in Kunshan, was not established until 1996. (Kaislaniemi 2002)

The Finnish WFOEs, as well as the JVs, are mainly located in Beijing-Tianjin area (WFOEs: e.g. Metso Minerals Tianjin, Metso Dynapac, Tamglass), Shanghai and the bordering Jiangsu province (WFOEs: e.g. Thermo Labsystems, Auramarine Asia, Efore Suzhou Electronics, Metso Automation Shanghai, Metso Paper Wuxi, Raflatrac, Shanghai Talo Furniture, Wecan Electronics, UPM-Kymmene Suzhou Paper Industry), and in the southern Guangdong province (WFOEs: e.g. Savcor Coatings, Perlos, Eimo, Guangzhou Novo Technology Development). (Kaislaniemi 2002)

In this chapter I will first shortly introduce the six Finnish wholly owned subsidiaries and their operations in China:

5.1.1 Neste Kunshan

5.1.2 Shanghai ThermoLabsystems

5.1.3 Wecan Electronics Suzhou

5.1.4 Metso Minerals Tianjin

5.1.5 Guangzhou Novo Technology Development

5.1.6 Kaukomarkkinat

Then in chapter 5.2 follows cross case analysis and a discussion comparing the case companies' entry mode choices to the theory.

5.1 CASE DESCRIPTIONS

5.1.1 Neste Polyester (Kunshan) Co. Ltd.

Neste Kunshan, a subsidiary of Neste Corporation, a factory producing unsaturated polyesters paints, was the first Finnish wholly owned enterprise in China. In 1999 Fortum (former Neste Corporation) sold the whole Neste Chemicals Division to Swedish Industrie Capital, who in turn sold the polyester business to an American company, Ashland, who is the current owner of Neste Kunshan.

At the time when Neste Kunshan was established Neste Corporation, was one of the largest industrial companies in Scandinavia. Its net sales were FIM 43.375 million in 1996 and it employed around 8662 people. Neste Chemicals Division produced and marketed adhesive resins, oxo products, unsaturated polyester resins and gelcoats and paper chemicals. In 1996 it had 40 production units in 11 countries in Europe, North America and Asia.

Neste Chemicals in China

In 1992 Neste started to study business opportunities in four Asian countries; India, China, South Korea and Japan. China was chosen and the planning phase started in 1994. A market analysis was carried out and unsaturated polyester paints were selected as the product for the Chinese market. The new unit was to serve as a bridgehead to the Chinese market.

In the beginning Neste studied the possibility of having a local Chinese partner. Based on Chinese market analysis, a business unit of a large Chinese state-owned company was selected as a prospective partner for the joint venture. The joint venture negotiations proceeded far, almost to signing of a contract, but towards the end the Neste people started to have doubts. The products of the joint venture were to be highly market oriented and needed an effective and customer oriented management system, not the management system and structure of Chinese state-owned companies.

"It [the negotiations] started to feel so tiresome and difficult. And when drafting the joint venture contract was so difficult you started to think how difficult the management of the joint venture would be." (Sierla 2002)

As the new unit in China was planned to be rather small, the joint venture form would have burdened the unit with too much administrative matters. The Neste management was also very aware of the fact that although the cooperation was working in the beginning, often the objectives of joint venture partners develop into different directions over time and the JV ends up in problems.

In addition, the people at Neste realized that unlike to what they had thought in the beginning there was not necessarily a need for a Chinese joint venture partner. The products of the planned unit in China were to be unsaturated polyester paints that are mainly used in reinforced plastic industry to coat products such as boats. The customers in this sector were mainly small so-called "village industry" companies, but also big state-owned companies and some big Japanese and Korean firms operating in China. During the JV negotiations Neste realized that this market was completely free of any governmental control.

"After a while we realized that this industry is no ways controlled by the authorities. There would have been no use to us to have a partner, that could have brought some connections to authorities." "The customers make their purchase decisions by comparing the price with the product and services, just like anywhere else." (Sierla 2002)

"If you choose a joint venture, you have to define in detail what is the contribution that the partner would bring to the venture. If it's nothing substantial, then you should do it alone. If you don't have guts to do it alone, then you better not do it at all." (Sierla 2002)

It was then that Neste Chemicals started to study the possibility of having a wholly owned subsidiary. The Kunshan Economic and Industrial Zone near Shanghai was particularly attractive to Neste Chemicals. There was no wholly foreign-owned company from the western countries in the Zone yet. However, the local government showed a strong interest and a high level of support towards the wholly owned factory project of Neste. Neste was also able to hire a very capable Chinese person, a manager at a local paint factory who later became the CEO of the Neste Kunshan. With the new Chinese manager Neste had all the needed local know-how to start in China without a partner. Furthermore, the investment to be made was quite small, only around USD 1 million, and thus the managers of Neste Chemicals felt that they could take the risk of diverting from the JV option that was still the "traditional" choice at the time.

"My personal belief is that it is a test to the business idea whether you dare to do it alone. Often the idea of establishing a joint venture comes from not having enough faith, so you take a partner and think it will be better that way." (Sierla 2002)

The Neste Polyester (Kunshan) Co. Ltd., a wholly owned subsidiary, received its business license in the beginning of 1996. In two years of starting up period, it reached the break-even point and was the most profitable unit in the division. The factory employed only around 30 people.

As mentioned in the beginning Neste Kunshan is nowadays owned by Ashland Corporation. And although it is a relatively small unit, the new owner sees it as a valuable bridgehead to China.

5.1.2 Shanghai Thermo Labsystems Co. Ltd.

Thermo Labsystems is a company developing and supplying biotechnology systems, products and services primarily for the needs of research and clinical laboratories. Its products include pipettes and tips, microplate instruments, microplates, magnetic particle processors, research reagents, and diagnostic kits. Since 1997 Thermo Labsystems has been part of the Life and Laboratory Sciences Sector of an American Thermo Electron Corporation (2001 net sales: USD 2.2 billion).

In 2001 Labsystems' net sales were USD 82 million and it employed 530 people, of which 430 are located in Finland. The company's products are sold through Thermo Bioscience Technologies sales units in 13 countries and manufactured in four countries.

Thermo Labsystems consists of two businesses. The *Liquid Handling Business* designs, manufactures and markets pipettes, tips, microplates and strips, as well as their accessories. Its sales, marketing and R&D teams are located in Vantaa, Finland, and its production mainly in Joensuu, Finland, and in Russia and China. The *Microplate Instrumentation Business* designs, manufactures and markets laboratory instruments, research reagents and diagnostic tests. They are manufactured in Vantaa and Shanghai, China.

First Joint Venture - Shanghai Feilong Medical Diagnostic Articles

In the mid 1990's Thermo Labsystems established two joint ventures in China. The first one, Shanghai Feilong Medical Diagnostic Articles Co. Ltd, was established in 1993 with Shanghai Institute of Biological Products and Shanghai Kening Developing Company. It produces diagnostic chemistry reagents for use at hospitals, clinics and blood centers. Later also Finnfund¹ invested in the venture. The ownership was divided so that Thermo Labsystems, Finnfund and Shanghai Institute of Biological Products each had roughly a share of one third, while the Shanghai Kening had a smaller share of 2%.

The Shanghai Feilong JV was a failure. The venture did not really ever get properly started. For a long time the JV partners were arguing over the management of the venture, most

¹ Finnfund is an investment finance corporation owned by the State of Finland, business and industry, and Finnish Export Credit Ltd. It provides equity capital, long-term investment loans and guarantees for profitable enterprises in emerging countries. It also offers advisory services and participates in projects and training in companies in which it has an equity stake.

importantly over the transfer of technology. By the time some kind of agreement was reached in 1997, Chinese competitors had already taken over the market at much lower prices, and thus the original business plan of the venture was not feasible anymore. After that, Thermo Labsystems has tried to find a buyer for their share. Eventually part of the share was sold. Finnfund has no longer investment in the venture and Thermo Labsystems now carries only 25%. It does not investment money or resources to the venture anymore.

Second Joint Venture – Shanghai Thermo Labsystems

In 1995 Thermo Labsystems established a second joint venture, Shanghai Thermo Labsystems, together with Finnfund and Shanghai Medical Analytic Instrument Factory (SMAIF). The Finnish side had a majority ownership in the venture, Thermo Labsystems 32,5 % and Finnfund 32,5 %, while the Chinese partner had 35%. (Sipilä 1996)

The JV partner, SMAIF, was a state-owned company belonging to a pharmaceutical group and thus close to the Shanghai Pharmaceutical Bureau. Its total sales were RMB 38 million (less than USD 5 million) in 1993 although its employees amounted to 700 people. The SMAIF was chosen as a partner because its distribution channels for its own product (freeze dryer products) seemed effective for the joint venture. Also, SMAIF had experience of cooperation with other western producers. (Sipilä 1996)

The Shanghai Thermo Labsystems factory assembled pipettes, electronic pipettes, disposable pipettes and microplates. The total investment of the company was USD 1,6 million. Thermo Labsystems was responsible for providing the technology and the equipment for the venture, while SMAIF provided the building, land-use rights and cash. Finnfund came in with a cash investment. (Sipilä, 1996)

Before establishing the two JVs in China Thermo Labsystems did not have any experience doing business in China, except for the general manager of the company who had been involved in China venture in Russia, which was very successful, and joint projects also in Pakistan and India. The experiences of especially the Russian venture were an encouragement for setting up the Chinese ventures. Investing in China was motivated by the large and growing market in China, high trade barriers, need for setting up own distribution channels in China and cheap labour costs.

The possibility of a wholly owned subsidiary was also considered in the early stages. However, the conclusion to form a joint venture was motivated by the view that the company lacked suitable personnel to run the company itself. (Sipilä 1996) Furthermore, Thermo Labsystems' managers saw potential difficulties in marketing, bureaucracy, technology transfer and language, if it was to run the company without a partner. Therefore the management saw it was in their interest to find a local partner in order to achieve faster market entry and create networks with potential clients and important officers. However, after starting the operations the sales channels of SMAIF did not prove to be effective.

"There were all kinds of problems. Everyone there [in China] wants to be a partner [in a Sino-foreign JV], mostly they are state-owned companies. First they promise you heaven and earth, but in the end the reality is nothing but problems. In a wholly owned subsidiary you don't have that kind of burdens. But that was the time when you had JVs, there were no other choices". (Paasonen 2002)

A more detailed description of the joint venture negotiations and the organization of the two JVs can be found in Sipilä's (1996) work.

Changing to a WFOE Mode

Also the Shanghai Thermo Labsystems JV ended up in managerial disagreements very soon. The main issue was transfer pricing. The components for the assembly of the pipettes were imported from Finland with high prices, and thus the Finnish partner was able to profit out of the venture, while the venture itself never started to make good profits. In late 1997 the disagreement led to a situation where Thermo Labsystems wanted to get out of the venture.

First the Chinese party suggested that the ownership on the Chinese side would be lifted to a higher level in the government owned Pharmaceutical group, giving the JV a more powerful partner on the Chinese side. However, after four months of negotiations it turned out that they could not invest anything to the venture and Thermo Labsystems returned to negotiate with SMAIF on termination of the JV.

Fortunately, in August 1998 the partners reached an agreement on the price and SMAIF, as well as Finnfund, were bought out. At the same time Shanghai Thermo Labsystems, now a wholly owned subsidiary, bought the Chinese company who was the distributor of Thermo Labsystems' medical instruments in China. In addition, as the JV had been operating in the facilities of SMAIF, with the termination of the JV Shanghai Thermo Labsystems moved to

new facilities in Jiangcha industrial area in Pudong (Shanghai). For the first year and a half the factory operated in rented temporary factory space until the new, own, factory was completed in 1999.

In the beginning Shanghai Thermo Labsystems produced only pipettes. The production of medical instruments was started in 1999 with enormous success. Through the distributor the company was able to acquire 50% market share in China, and has both price advantage and quality advantage over its competitors. This makes also selling the pipettes easier as Thermo Labsystems now has critical mass in China.

In 2001 the turnover of Shanghai Thermo Labsystems was USD 6 million. Both domestic (China) and export sales (USD 1,3 million in 2001) are growing. The factory employs 56 people, and additional 14 people work in marketing.

Future

As for most foreign companies, China's WTO membership will bring some concessions to the operations of Shanghai Thermo Labsystems. The customs duties will decrease and the company will gain trading rights, and thus will be able to do importing itself. Thermo Labsystems is also looking forward to the reforms in banking, as the WTO will enable foreign banks to operate in China. Also, it is hoped that with the new regulations the Chinese officials would be better able to hit down the rampant violation of intellectual property rights.

However, the biggest changes in the near future of Shanghai Thermo Labsystems are not those brought by the WTO. In the next two years the American owner of Thermo Labsystems is planning to make large investments in Shanghai Thermo Labsystems. The plan is to increase the capacity of the factory in Shanghai considerably, possibly even ten-fold.

5.1.3 Wecan Electronics (Suzhou) Co. Ltd.

Wecan is an international electronics contract manufacturer that produces and sells telecommunications products and services to telecommunications system suppliers, in particular to manufacturers of wireless (mobile) communications network systems. In 2001 Wecan's turnover was 46,5 million euros, and it employed around 420 people.

Wecan Group's parent company, Wecan Electronics Oyj, is located in the Finnish town of Ylivieska. In addition to Ylivieska, Wecan has manufacturing plants in Estonia (1997) and in China (1999), and a service unit in Helsinki. Over the past few years Wecan has been internationalization fast. This has also been reflected in the geographical distribution of turnover: In 2000, the share of foreign deliveries in turnover rose to as high as 41.6 % (28.3 % in 2000).

In 2000 Wecan was listed on the main list of Helsinki Stock Exchange. In the fall of 2002 Wecan merged with another Finnish electronics contract manufacturer Scanfil and now operates under the name Scanfil Oy. However, this case concentrates only on the former Wecan Electronics and its operations in China.

Wecan in China

In 1999 Wecan Electronics established a wholly owned manufacturing plant in Suzhou in Jiangsu province near Shanghai. Before establishing the factory in Suzhou Wecan did not have any previous experience of China. However, Wecan had some experience of international production through its factory in Estonia. The idea behind going to China was to be close to the customer Nokia that has a GSM base station and cellular transmission products factory in Suzhou. Of course China is also an attractive location because of the lower labour costs.

Wecan Electronics is not the only Finnish company who has followed Nokia to China. In 1999 four Finnish Nokia subcontractors (Ojala, LK-products, Efore and Wecan Electronics) started their operations in Suzhou (Kauppalehti 09.08.1999). Other Finnish companies who have followed Nokia to China are Perlos in Guangzhou and Eimo in Shenzhen.

"We just started to put up the company, didn't do any research before hand. Just contacted the park [the Suzhou technology park], the same park where Nokia is. Of course we asked a lot of things from Nokia, and got a lot of advice." (Aakula 2002)

When planning the operations in China, it was clear from the beginning that the new subsidiary would be wholly owned. Joint venture mode was never even considered.

"I don't see any reason why we should have had one [a JV partner]. It would have been no use to us. But it would have brought problems for sure." (Aakula 2002)

At the moment the factory employs some 100 people, with two expatriates, Finnish production manager and general manager. The turnover of the subsidiary in China is about 7 million euros, 20 % of the total. Although the whole business in China was first based on subcontracting for Nokia, now the sales to Nokia account only for 40%. Other big customers in China are e.g. Motorola. At the moment the global market is experiencing a downturn that has decreased Wecan's sales also in China. Other than that the operations in China are functioning as expected.

Starting in China

The current CEO of Wecan Electronics, Pauli Aakula, went to China himself to put up the operations there. In the very early stages he hired a Chinese manager, together with whom they started the process getting a business license, putting up the factory and recruiting the Chinese staff.

According to Aakula (2002) everything went smoothly in the establishing period, especially dealing with the local authorities was made easy.

"We only had the [Suzhou technology] park as an interface [with the authorities]. They had all instances represented there. And they handled everything smoothly. Just one office for everything." (Aakula 2002)

"The fact that we went there to support Nokia's operations helped a lot in getting things done." (Aakula 2002)

Of course, also the help and advice from Nokia was crucial in the beginning. In the beginning Wecan also used the services of a Shanghai law firm in getting the business license. Other than that, everything was done alone. Aakula (2002) emphasizes that there is no sense in the

argument of choosing the joint venture form just to get local know-how. In his opinion, local know how can be acquired by hiring and just going to China and start learning.

“That [local knowledge] comes with the people you hire. I don't see how a joint venture partner could contribute anything. Especially as we followed Nokia.”
(Aakula 2002)

5.1.4 Metso Minerals (Tianjin) Co. Ltd.

Metso Corporation was created through the merger of Valmet and Rauma in 1999. Metso is a global supplier of process industry machinery and systems, as well as know-how and aftermarket services. The Corporation's core businesses are fiber and paper technology (Metso Paper), rock and mineral processing (Metso Minerals) and automation and control technology (Metso Automation). Metso's net sales were 4343 million euros in 2001, and it employed 30 424 people.

With 2 joint ventures, 3 wholly owned subsidiaries, 10 sales/representative offices and 1 technology and service center, Metso Corporation is one of Finnish companies with most operations in China. It employs more than 1900 people in China (excluding the JV personnel).

Metso Minerals

Metso Minerals develops, designs and delivers equipment and total solutions for the drilling, crushing, grinding, beneficiation, screening and transport of rock and other minerals. The main products are crushers, screens, mining equipment, grinding mills, wear products, conveying equipment and asphalt pavers and rollers. The main customer segments are quarries, mines and civil engineering contractors.

Metso Minerals' net sales were 913 million euros in 2001, a 63 percent increase from previous year. The increase in net sales was mainly due to Metso Corporation acquiring the Swedish Svedala Industri AB, one of its biggest competitors, in September 2001.

Metso Minerals has sales and service units, agents and distributors in 150 countries, and manufacturing facilities in Australia, Belgium, Brazil, Canada, Chile, China, Denmark, Finland, France, Germany, India, Japan, Malaysia, Mexico, the Netherlands, New Zealand, Norway, Peru, South Africa, Spain, Sweden, the UK and the USA.

The Beginning - Metso Joint Ventures in China

The companies that nowadays belong to the Metso Corporation exported their first products to China already in the 1950s. The first production unit was established in 1989. This JV, *Valmet*

Xian Paper Machinery Co. Ltd., in Xian was also the first Finnish owned production unit in China. A second JV, *Shanghai Neles Jamesbury Valve Co. Ltd.*, was established in Shanghai in 1994. The both JVs were typical 50-50 JVs of that time. The Valmet Xian operation was a tough learning experience. It suffered from all classic problems and mistakes of early JVs in China, and it took nearly ten years before the unit got its operations to a satisfactory level. The Shanghai Neles Jamesbury operation was more successful. Nevertheless, although at the moment both JVs are at a satisfactory level they are still “just joint ventures – not our [Metso’s] own businesses”, and “we [Metso] have tried to get rid of the Shanghai JV, but it is impossible” (Hallamaa 2002).

Metso Minerals Tianjin Co. Ltd.

Metso Minerals started its China operations in 1991 with a subsidiary in Hong Kong, and a representative office in Beijing in 1993. In the mid 1990s Metso Minerals made some very large deliveries in China, especially to the Three Gorges Dam construction site on Yangtze River. The market in China looked promising and after some market studies Metso decided in 1996 to start manufacturing in China. The preparations started in 1997, and in 1999 *Metso Minerals Tianjin Co. Ltd.*, a wholly owned subsidiary, started operations.

After Metso Minerals Tianjin production unit, a network of sales offices was established in China (Beijing, Nanjing, Guangzhou, Chengdu).

Metso Minerals Tianjin is located in TEDA (Tianjin Economic and Development Area) in Tianjin, a large industrial city near Beijing. The company itself employs around 40 people, but when taking into account the subcontractors the total number rise to 300-400 people. The customers of Metso Minerals are both state-owned and municipal, as well as private companies; quarries, mines and civil engineering contractors.

Other Metso Units in China

After Metso Minerals Tianjin, also Metso Automation started a wholly owned subsidiary in Shanghai. *Metso Automation Shanghai Co. Ltd.* is located in a free trade zone and produces also for export to other Asian countries.

The third Metso wholly owned unit in China is Metso Dynapac. This former competitor located in Wuxing near Tianjin, became part of Metso Minerals through the Svedala acquisition in 2001. Lastly, Metso Paper opened a technology and service center, *Metso Paper Wuxi Co. Ltd.* (also a wholly owned unit), near Shanghai in 2001.

In addition to the 2 JVs, 4 WFOEs and 1 technology and service center, Metso Corporation has altogether around 10 sales/representative offices in China.

Wholly Foreign Owned Subsidiary

One of the most important reasons for starting production in China was the fact that the local companies who buy with local currency can only buy products made in China. As China has tight currency restrictions, few small quarries and smaller mining companies have access to foreign currency. For larger companies Metso Mineral sells also imported machinery, with dollars, through the representative offices. These are e.g. large mining companies buying large pieces of machinery, and their purchases are often financed by organizations such as Asian Development Bank.

The reason for choosing the wholly owned subsidiary mode for Metso Minerals rather than a JV is mostly due to fact that the investment environment in China has changed. In the late 1980s when Valmet Xian was established, JV was the only possibility. Later in early 1990s when Shanghai Neles Jamesbury Valve started the wholly owned subsidiary was already an option utilized by few investors, but JV was still seen as the only feasible option by most companies. Since the late 1990s the JV option was not even considered anymore when starting Metso Minerals Tianjin, Metso Automation Shanghai and Metso Paper Wuxi.

"We have tried all these different concepts: we have JVs, representative offices and wholly owned subsidiaries. That is our Metso background in China. . . . Today I would not establish a JV no matter what, unless it's absolutely necessary. Our JVs are nowadays doing ok, but they are not our systems. They are JVs. I can't think of any reason why one would want to have a JV these days". (Hallamaa 2002)

Also, Metso Minerals' business sector is categorized as "encouraged" in the Investment Guidance Catalogue of the State Planning Commission. This, and the fact that Metso Minerals' products are high-tech in their own category, has made dealing with Chinese officials easy.

Metso Minerals' position in China is good at the moment. Metso was lucky to be the first company in its business sector to enter China, three years ahead of its worst global competitor Svedala, that Metso later acquired in 2001. The head start is an important advantage. For Metso Minerals the first years of 96-97 in China were learning period, after which the company's China strategy was redesigned. After that getting the market share has been just hard, patient, long-term oriented work. In the future competition is likely to be harder. The WTO will lower customs duties and bring more imported products to the market. As such, the WTO will not have great influence on Metso's operations in China. Also, it is likely that some government supported local Chinese competitors may emerge.

5.1.5 Guangzhou Novo Technology Development Co. Ltd.

Novo Group is a Finnish IT company whose business areas include software services, IT operating and network services, and hardware services for both corporate and public sectors. Novo Group's net sales were 295 million euros in 2001, and it employs over 2000 IT-professionals.

Novo has foreign subsidiaries in six countries, in Estonia, Germany, the Netherlands, the UK, the USA and China. Foreign operations accounted for approximately 6.9 % of net sales in 2001. There are approximately 130 employees at foreign units.

Joint Venture - Beijing Novo Information Technology Co. Ltd

Novo's business in China started initially in the early 1990's when Novo's employees started traveling in and out of China working on many projects. The first investment was made in August 1999, when Novo Group established a joint venture, *Beijing Novo Information Technology Co. Ltd*, together with Beijing China SIWEI Surveying and Mapping Technology, a governmental institution. Novo Group has a majority (65%) ownership in the joint venture, while the China SIWEI holds 15%. In addition, as in many Finnish joint ventures in China, Fnnfund² has a 20% share in the venture.

The joint venture's products are map applications built on satellite imaging and GIS (Geographical Information System). This software, developed to generate digital terrain models required especially for designing telecommunications networks, can be used in network planning all over the world. Currently Beijing Novo employs around 20-30 people.

Wholly Owned Subsidiary - Guangzhou Novo Technology Development Co. Ltd.

Right from the beginning, inside the Beijing joint venture, started also a team of people that were working for the *Novo Group Infra Solutions Division*. The Novo Infra Solutions Division provides comprehensive service relating to the infrastructure of information technology, including e.g. planning, consultation and product services, services designed to

² Fnnfund is an investment finance corporation owned by the State of Finland, business and industry, and Finnish Export Credit Ltd. It provides equity capital, long-term investment loans and guarantees for profitable enterprises in emerging countries. It also offers advisory services and participates in projects and training in companies in which it has an equity stake.

secure the safe and reliable use of hardware, networks and data communications facilities, as well as providing the customers with the software and hardware. Approximately 10 percent of the division's personnel are engaged in client projects abroad.

Expansion into the Chinese market is a part of Novo's internationalization strategy, according to which the primary goal of the Infra Solutions Division is to expand its operations outside Finland in its core areas of expertise, i.e. in expert design, installation and operation services of the systems critical for the customers business operations. For the Chinese market, Infra Solutions selected a few central products that it started to sell. The idea was to start gradually and to get a feel of the market.

However, very soon after the beginning it became clear that the joint venture form brought certain limitations to the operations of the Infra Division. This is because even if Novo has majority ownership in the joint venture it does not give right to make decisions alone. The joint venture law in China requires that both partners in the venture must authorize all decisions. This requirement brought certain bureaucracy to the operations, whereas the Infra Division's business area required the ability to respond fast and make quick decisions.

It was therefore decided that the Infra Division should be separated from the Beijing Novo as a separate company with a wholly owned mode. Guangzhou, in the southern-most Guangdong province, was selected as the location for the new wholly owned subsidiary, as it was not seen meaningful to have two units in the same city. The Novo Group board in Finland made a decision about the new subsidiary in June 2000, and the *Guangzhou Novo Technology Development Co. Ltd.* got its business license on July 1st 2000. After a few weeks of starting arrangements the Infra Division team in Beijing moved to Guangzhou and the new unit was fully operational in August 2000. At the moment Novo Guangzhou has some 12 employees. In addition there are some people left in the Beijing office working for the Infra Division. Majority of the employees are Chinese. Together the Beijing and Guangzhou units have 5 Finnish expatriates.

Different Business Requires a Different Company Form

The primary reason for having a joint venture form in Beijing and a wholly owned company in Guangzhou is the very different nature of the businesses. The business Beijing Novo does,

satellite imaging, GIS and related software, is the kind where there is an advantage of having a governmental institution as a partner.

"A certain kind of business in China requires that you have a partner, because in that way you can get certain contacts." (Niukkala, 2002)

"It is very rare that foreign-funded companies are permitted to carry out work related to surveying in China. It is also quite new that a foreign corporation develops its products specifically for the Chinese market" (Beijing Novo's General Manager Antti Johansson, Novo Group press release Sep 1, 1999)

The products Beijing Novo offers have been developed in co-operation with the Chinese counterparts. On the other hand, the business the Novo Infra Division does in China is based on a ready concept. The Infra Division is expanding into the Chinese market by duplicating the same business concept and the same products and processes that it applies in Finland and other countries. Furthermore, as mentioned earlier, the business of Infra Division requires an ability to respond fast and therefore the wholly owned mode was necessary.

Although the Beijing and Guangzhou Novo are now separate companies, the two units still co-operate closely. Part of the Guangzhou Novo's employees are still located in Beijing and the two units do projects together.

Finnish Customers as a Starting Point

The second factor supporting the wholly owned mode is the fact that the customer base was already there when Guangzhou Novo started its operations. The target customers of Guangzhou Novo are primarily Finnish companies, secondly other Western companies and only thirdly Chinese companies. Many of the Finnish customers are also Novo's customers in Finland. Therefore, it was not crucial to Guangzhou Novo to have the connections and the experience of how to deal with Chinese customers, that is often the argument for selecting the joint venture mode.

"Our main focus is the western companies in China. This is our starting strategy. It is an advantage that we don't even have to start selling to Chinese customers. They come gradually after some time" (Niukkala, 2002)

From the customer perspective the strength of Novo Guangzhou is that they can offer the same service in China as in Europe. Being able to work with a familiar IT company with reliable,

customer oriented and high quality service brings value added to Finnish companies who operate in China, where the challenges of the special characteristics of the environment often cause headaches to foreign businesses.

"In China there are a lot of those one man IT-companies. But you never know whether they still exist tomorrow. And you don't know what their background is. That is a risk for many companies. And IT is something that companies want to protect well, not openly show it to the whole world." (Niukkala, 2002)

Success factors

After two years of operating Guangzhou Novo is starting to reach the point where the initial investment has been recovered and the subsidiary is starting to make money. According to Niukkala (2002) that is a little faster than the typical 3-year break-even time of foreign invested companies in China.

The two factors for success that Niukkala (2002) emphasized are knowledge of local ways of doing things and recruitment. In Guangzhou Novo's case the operations started inside the Beijing joint venture, which made it possible to find the local employees and learn the way of running a company in China before putting up the wholly owned subsidiary in Guangzhou. According to Niukkala (2002) some foreign companies have established wholly owned subsidiaries without having any Chinese employees or experience. But they have soon ended up in trouble, having to hire employees in haste and not having the knowledge of how to handle the administrative matters.

"If you have experience of China, it is possible to have a wholly owned subsidiary, and to do it rationally and successfully. But without local knowledge, how ever you acquire it, by recruiting or in some other way, you will need it." (Niukkala, 2002)

In the near future Guangzhou Novo's strategy is to continue gradual growth, expanding the product categories in China according to the wishes of the customer. China's WTO membership will not directly affect Guangzhou Novo, however, it will most probably increase foreign investment into China and in that way increase both business and competition.

5.1.6 Kaukomarkkinat

Kaukomarkkinat is a leading Finnish trading house operating internationally. It has over 20 subsidiaries or representative offices in 14 countries. The company is owned by Kesko Oy and in 2001 its turnover was 1727,5 million euros. Kaukomarkkinat specializes in international technical trading, the import and wholesale of the world's leading branded products (e.g. Panasonic, Technics, Adidas, Citizen) as well as the import, manufacture and marketing of high-quality optics.

International Technical Trading

International technical trading is the largest business sector of Kaukomarkkinat and one of its strongest areas of expertise. The key product groups in technical trading include machines, raw materials and accessories, and products for the food, forest, electronics, plastics and packaging industries. The best-known part of international technical trading is Kauko East-West Trade, which is doing business mainly in China, Central and Eastern Europe and Russia. The operations in China and Russia make up about 90% of Kauko East-West Trade's business.

Kaukomarkkinat in China

Kaukomarkkinat was one of the first Finnish companies doing business in China. The business started in 1952, only three years after the founding of the People's Republic of China, with exporting of pulp, and continued in 1955-57 with exporting of five cargo ships together with Wärtsilä.

At the moment Kaukomarkkinat has two representative offices in China. The first one was established in the early 1980's in Beijing, and the second in the turn of the 1990's in Shanghai. Later a representative office was also established in Guangzhou, but it was closed down in 2000, at the same time when a subsidiary opened in neighboring Hong Kong. The representative offices in China employ around 40 people. In addition there are 6 employees in the head office in Finland, who handle administrative matters, financing and contacts to clients.

In China Kaukomarkkinat operates in four main sectors. Pulp and paper industry is the biggest sector. In the 1980's Kaukomarkkinat represented major Finnish pulp and paper machinery producers such as Valmet, Rauma Repola and Strömberg. Nowadays Kaukomarkkinat sells

machinery and equipment of such Finnish producers as Vaahto, Quatrol, Aqua and Larox. The second, nowadays fast growing, sector is medical equipments. Kaukomarkkinat provides hospitals with special equipments for intensive care, surgery, laboratories hospital rooms and dental care. The main principal is Instrumentarium in Finland, but Kaukomarkkinat represents also some producers in the USA and Japan. The third sector is environmental technology, where Kaukomarkkinat sells machinery for wastewater treatment, dredgers for waterway maintenance and waste management. The fourth sector is shipbuilding. The customers of Kaukomarkkinat in China are state-owned companies, or provincial or communal entities.

WTO Makes a Wholly Foreign Owned Trading Companies Possible

The idea of an own subsidiary in China is not new to Kaukomarkkinat. The possibility of having a subsidiary in China has been considered many times over the years. However, so far it has been nearly impossible as the law in China prohibits foreign companies to do trading in China. Trading companies, as defined by Chinese law, are firms solely engaged in the import and export of products; they do no manufacturing of their own. Until relatively recently, only Chinese state-owned trading companies could import and export goods to and from China. (Zeng 2002)

“Foreign companies were first allowed to establish trading companies in China in 1996. They could do so only through joint ventures in which the Chinese partner held a controlling equity interest, according to the Tentative Measures for the Establishment of Pilot Sino-Foreign Trade Companies (Tentative Measures), issued by the Ministry of Foreign Trade and Economic Cooperation (MOFTEC) and the State Economic and Trade Commission (SETC). Other stringent requirements in the Tentative Measures included mandates that foreign companies have at least \$5 billion in total sales the year before they apply and \$30 million in average trade volume with the PRC in each of the previous three years. Chinese partners, meanwhile, were required to have an average import-export volume of \$200 million for three consecutive years before they applied, with an export volume of at least \$100 million. These joint venture trading companies had to have registered capital of at least Y100 million (\$12.1 million), which had to be paid up according to a schedule that is much shorter than that of typical Chinese-foreign joint ventures. Because of these restrictions, only five joint venture trading companies have reportedly been established in China since 1996, all located in either the Pudong District of Shanghai or the Shenzhen Special Economic Zone in Guangdong, as required by the Tentative Measures.” (Zeng 2002)

Therefore, so far Kaukomarkkinat has been forced to operate in China through representative offices that are not allowed to carry out any business transactions, but only to represent the company. However, this will all change with China's WTO membership. China's accession agreement to WTO stipulates that foreign companies will receive trading rights after the transition period.

In November 2001 Kaukomarkkinat announced that it would establish a subsidiary in China as soon as the transition period ends in 2004 (Kauppalehti 29.11.2001). This will bring many changes in the way Kaukomarkkinat does business in China. For example, at the moment Kaukomarkkinat is not allowed to import anything to the country. When Kaukomarkkinat sells machinery and equipment to China, either the customer imports the goods or Kaukomarkkinat uses a licensed Chinese export-import company, who of course charges for the importing service. Also, at the moment foreign trading companies are not allowed to have any warehouses of their own in China. Neither can they seek trade finance in China, accept local currency as payment or involve in domestic trade in China. (Saastamoinen, 2002)

“An own subsidiary brings us competitive advantage. In the first place it helps us to compete with the local Chinese companies. And when the number of foreign companies grows, we have to structure our operations so that we are in a good competitive position.” (Saastamoinen 2002)

5.2 ANALYSIS

5.2.1 Cross Case Analysis

All of the case companies had some things in common. They were all subsidiaries of medium sized or large Finnish companies, who operate in business-to-business market. All of the case companies had invested in China to pursue a market share in China and were selling their products (mainly) to the Chinese market. Thus, they were not using China only as a cheap production location for export.

Table 5-1: Summary Table of the Case Companies

Company	Year when WFOE established	Earlier operations in China	Products	Size	Customers in China
Neste Kunshan	1996 (first Finnish WFOE in China)	None (Neste Chemicals Division)	Unsaturated polyester paints	-Investment: USD 1 million -Employees: ~30	Both state-owned, municipal and private local companies
Shanghai Thermo Labsystems	1998 Chinese partner bought out of the JV	- JV: Shanghai Feilong in 1993 - JV: Shanghai Labsystems in 1995	Pipettes and medical instruments	-Turnover (2001): USD 6 million -Employees: ~70	Both state-owned, municipal and private local companies. Export ~20 %
Wecan Electronics Suzhou	1999	None	Contract manufacturing of wireless communications network systems	-Turnover (2001): USD 7 million -Employees: ~100	First only Nokia, later also other companies in the electronics business
Metso Minerals Tianjin	1999	- JV: Valmet Xian Paper Machinery in 1989 - JV: Shanghai Neles Jamesbury Valve 1994 - Representative offices	Rock crushers, mining equipment, asphalt pavers and rollers	-Employees: ~40	Both state-owned and municipal, as well as private local companies
Guangzhou Novo Technology Development	2000	- JV: in Beijing since 1999	Software, consulting	-Employees: ~12	Mainly Finnish and other western companies
Kauko-markkinat	2004 (?)	- 50 years - At the moment representative offices in Beijing and Shanghai	Machinery and equipment for forest industry, shipbuilding, health care and environmental		Mainly state-owned companies, and provincial or communal entities

			technology		
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When one looks at the reasons the case companies gave for selecting the WFOE mode, one can find examples of all the factors presented in the framework (chapter 4.3).

Entering firms and their experience:

Four out of six of the case companies (Metso, ThermoLabsystems, Novo Group, and Kaukomarkkinat) had previous experience of China, either through joint ventures or representative offices. Wecan Electronics started in China as Nokia's subcontractor. As Wecan had had both a customer and an advisor in China there was no need for earlier experience. Neste Kunshan was the only one of the case companies that started in China alone "from scratch".

Joint ventures:

Three of the case companies (Metso, ThermoLabsystems, Novo Group) had joint venture(s) in China before the WFOE. Some of these JVs were complete failures, others relatively successful. However, all of these companies mentioned the difficulties of JV management as one of the reasons why they chose the WFOE mode for their new units in China. Also, the case companies that did not have an own JV in China (Neste, Wecan Electronics, Kaukomarkkinat) all mentioned that the well-known difficulties in JV management as one reason for selecting the WFOE mode.

Host country environment - foreign investment policy:

The influence of China's foreign investment policy can be discerned when one examines the case companies and their entry mode choices over the past twenty years. In the 1980's joint venture was in practice the only option for foreign investors (see case Metso: Valmet Xian Paper Machines). In the early 1990's the foreign investment policy in China started to change in the favour of wholly owned subsidiaries. However, although the number of wholly owned subsidiaries started to increase, many companies still opted for joint ventures, which was the conventional choice (see case Metso: Shanghai Neles Jamesbury Valve, and case ThermoLabsystems: Shanghai Feilong and Shanghai ThermoLabsystems). By the end of 1990's most of the discriminatory policies toward wholly owned subsidiaries have been removed and many of the new investors do not even consider the joint venture option when planning their operations in China (see case Wecan Electronics, and case Metso Minerals Tianjin).

Table 5-2: Case Companies: reasons for selecting the WFOE mode

Neste Kunshan	<ul style="list-style-type: none"> • First JV form was planned, but in the negotiation phase Neste started to get second thoughts because the negotiations were tedious. It was thought that the running of the JV would probably be as difficult. • The market in question was not under any governmental restriction and therefore it was seen that there was no need for a partner to provide governmental connections. • Neste found a good Chinese manager in the planning phase. • The investment was not large and therefore Neste thought it could bare the risk.
Shanghai Thermo Labsystems	<ul style="list-style-type: none"> • Labsystems started in China with two JVs: Shanghai Feilong in 1993 and Shanghai Labsystems in 1995. The Shanghai Feilong JV was a failure. • The partners of Shanghai Labsystems had disagreements over the management of the venture. Finally as Labsystems was acquired by American Thermo Electron, it was decided that the JV must go. In 1998 Labsystems bought out the Chinese partner in Shanghai Labsystems, and thus it became a WFOE. The factory was moved to new facilities and Labsystems also bought a distributor in China.
Wecan Electronics Suzhou	<ul style="list-style-type: none"> • The wholly owned mode was a self-evident. JV form was never even considered. It was seen as bureaucratic and difficult. Wecan did not see anything that it could have gained from having a partner. • Wecan went to China to contract-manufacture for Nokia, thus it had both a customer and an advisor in China.
Metso Minerals Tianjin	<ul style="list-style-type: none"> • Metso (at that time Valmet) was the first Finnish company to have a production unit (JV) in China, Valmet Xian Paper Machinery in 1989. A second JV was made in 1994, Shanghai Neles Jamesbury Valve. • When putting up the Metso Minerals in Tianjin in 1999 the joint venture option was not even considered anymore. The environment in China had changed over the years and JV was not see as a viable option anymore.
Guangzhou Novo Technology Development	<ul style="list-style-type: none"> • The bureaucracy of the JV form turned out to be unsuitable for the business. Infra Divisions business needed an ability to make faster decisions. • The customer base existed. Customers are mainly Finnish and other western companies. • Novo already had some experience through the JV of how to run business in China. • The infra division had already started its operations inside the JV. It was not starting from scratch.
Kaukomarkkinat	<ul style="list-style-type: none"> • Kaukomarkkinat has a 50-year history in China. However, so far the legislation in China has prohibited it from having a wholly owned subsidiary. So far Kaukomarkkinat has operated in China through representative offices. • China's WTO membership will make it possible for Kaukomarkkinat to establish a subsidiary after the transition period. This will bring a many improvements in the way Kaukomarkkinat does business in China.

5.2.2 Case Examples Compared with the Entry Mode Theories

All of the entry mode theories presented in chapter 3 have some explanatory value when analyzing the case examples. But what makes it difficult to analyze the applicability of each of the theories is the fact that the companies' entry mode choices were limited by legislation. Only the bargaining power theory takes into account the possibility that companies are not able to choose their entry modes freely. The bargaining power theory applies well to the China of 1980's and early 1990's, when foreign companies compromised for the joint venture mode in

order to be able to enter China. The bargaining has also been done on a macro level (e.g. between China and WTO) as described by Ramamurti (2001) (see chapter 3.4).

In four of the case examples (Metso, ThermoLabsystems, Novo and Kaukomarkkinat) one can see the kind of incremental increase in involvement in China as described by the internationalization model. The transaction cost theory applies better to the two case companies (Neste and Wecan) that started in China directly with a wholly owned subsidiary. As described in chapter 3.5, the key difference between internationalization model and transaction cost approach is their stance toward uncertainty. According to internationalization model companies react to uncertainty by proceeding incrementally, while according to transaction cost view companies react to uncertainty by seeking better control of the operations. Better control of the operations was one of the key factors in all of these cases. It was the most important factor for Neste and Wecan who chose the wholly owned subsidiary mode from the beginning. And it was the reason why Metso, ThermoLabsystems and Novo have moved to wholly owned subsidiaries after first operating through joint ventures.

5.2.3 Discussion on Important Factors Arising from the Case Studies

Local Know How

All interviewees emphasized that although it is crucial to have local know how, that **should not be the reason for choosing a joint venture mode**. Local know how is clearly important but there are other ways to acquire it, such as hiring local managers, using consultants and agents and just going to China and start gathering information little by little.

"If I think now afterwards how should a company with no experience go there [China] . . . based on my experience I would give an advice just to spend time there and meet all kinds of people, and either find a good consultant or a local recruit, and then just start from there. The fact that Chinese companies have people who know China is not a good enough reason to choose a joint venture. It [starting a wholly owned subsidiary] is just preparations and fact finding." (Sierla 2002)

As one of the interviewees stated: "If you choose a joint venture, you have to define in detail what is the contribution that the partner would bring to the venture. If it's nothing substantial, then you should do it alone" (Sierla 2002). If the joint venture does not offer any significant

strategic or competitive advantages (see chapter 3.1) and if the partners do not have a good fit (see theoretical framework in chapter 3.5), forming a JV just to gain local know how seems too big a sacrifice. As one of the interviewees put it:

“Joint venture contracts are usually drafted for 30-50 years. It’s like marriage. Once you get in to it, that’s it then, difficult to get out or change anything!”
(Paasonen 2002)

Dealing With Chinese Officials

Taking care of administrative matters, getting licenses and dealing with Chinese officials naturally requires experience of local habits and bureaucracy. However, after one becomes familiar with the system, all the interviewees had mainly good things to say about Chinese officials. While “back in the old days” the communist style bureaucracy may have been a big hurdle for conducting business in China, according to many of the interviewees today the Chinese officials have totally different attitudes.

“Back in the old days” the government and local officials task was to keep a strict control on all foreign activities in China. JVs were mostly formed with state-owned companies and it was the local and governmental officials who usually suggested prospective JV partners for foreign companies. Chinese officials often had their fingers in everything, keeping foreign investors in their control and trying to get all possible financial gain from them. Little by little as the FDI restriction in China have been loosened and the local officials have learned the benefits of FDI, the attitudes have changed. Today the different regions in China are competing with each other for foreign investors. Especially in technology parks and other areas that try to attract foreign investment, dealing with business licenses etc. have been tried to make as easy as possible

“In China local officials are often appreciated based on how much foreign companies they have been able to attract”. (Hallamaa 2002)

Most of the interviewees saw that today the governmental and local officials in China are very flexible and often helpful in trying to find ways facilitate foreign companies business activities. For example, still few years ago the legislation required that WFOEs must be “high-tech” companies and that they must export 50% of their production. However, according to the interviewees the local authorities are very flexible in interpreting these rules to the benefit of

the foreign investors. This all suggests that it is much easier for foreign companies to start operations in China today than it was before.

Hybrid Company Forms

None of the case companies clearly utilized a hybrid company form (some kind of combination of joint venture and wholly owned subsidiary form) as described in chapter 4.2.3. Guangzhou Novo could be described as a hybrid form to some extent, but its strategy was emergent, not planned. The company started as a unit inside the Novo JV in Beijing and later became a separate company with WFOE mode. This clearly made it easier for Novo Group to get started with the wholly owned unit. When Guangzhou Novo was formed it was already fully functional with employees, products, customers and experience. The two units still operate closely together. Also Shanghai ThermoLabsystems started out as a JV and the Chinese partner was later bought out. However, that was also a emergent strategy, not a planned one. After the JV ended up in managerial problems ThermoLabsystems was very lucky in managing to negotiate its partner to sell its share in the venture. The situation could have also ended in a deadlock situation, as it has with ThermoLabsystems' other JV in China, Shanghai Feilong Medical Diagnostic Articles.

However, it is evident that the so-called hybrid company forms, especially JVs with silent partners, are widely utilized in China. Also, as long as the legislation limits foreign investment forms in China foreign investors will continue "to push against the ceilings of the old JV and WFOE frameworks, and experiment with the newer, less clearly defined options" (Sutter, 2000). A good example is the *Metso Paper Wuxi Co. Ltd* (A WFOE), Metso Paper's technology and service center near Shanghai. As foreign companies are not so far allowed to have service operations in China, Metso established a technology and service center (R&D and technology units are allowed) that also does service. In practice the unit operates as a service center.

Joint Ventures

Is the era of joint ventures then over in China? Although the share of wholly owned subsidiaries in China has increased dramatically over the last 10 years, and surely will

continue to increase, there are still markets where joint venture form is necessary. These are the sectors where joint venture form is still either required by law (See Appendix 3), or where the government has such a high influence (such as telecommunications) that good connections to high authorities are crucial.

"The most important thing [in choosing the entry mode] is the market segment where you sell the product and its requirements" (Lukkarinen 2002)

However, the way in which JVs are formed in China is likely to change. In the early days, a typical JV was formed with a state owned enterprise, often the partner was chosen according to the recommendation of the local government officials.

"I think the JV will remain used, but so that they are formed according to the requirements of the business. And the officials won't have their fingers in the companies anymore." (Lukkarinen 2002)

Kaislaniemi (2002) suspects that in the future contractual joint ventures (CJV) may gain in popularity. A CJV is based on a contract between the partners and does not require forming a separate legal company. Therefore, a foreign investor can e.g. agree on marketing and distribution cooperation with a Chinese partner on CJV basis while having the manufacturing in a wholly owned subsidiary, and thus avoiding the problems of shared control of a equity joint venture. This is also why although joint ventures in China have been studied widely, the topic is still timely because the environment and the nature of JVs is changing.

However, the era of joint ventures, that was created mainly by the restrictive foreign investment policies of the Chinese government is clearly over. In fact, some of the interviewees in this study found the idea of a joint venture in China so alien that they suggested a better research question: "why would any company still establish a joint venture in China these days?"

WTO

All case companies saw that China's WTO membership will bring positive effects to their business in China. They expected it to "make things easier" and to decrease uncertainty. On the other hand, competition is likely to increase.

The effect of the WTO were not very significant to the case companies, because they operated in businesses that were not going to face large changes. Except for Kaukomarkkinat, as after the WTO transition period China will most likely give trading rights to foreign companies.

6 SUMMARY

Over the past twenty years China has changed from a closed economy to an important market and production location for international companies. From a foreign investors perspective China has changed from a strictly regulated country where foreign investment was allowed only through joint ventures with Chinese companies, to a more and more open and “normalized” market.

In the 1980’s joint venture form was in practice the only option for foreign investors. In the early 1990’s the foreign investment policy in China started to change, and although the number of wholly owned subsidiaries started to increase, many companies still opted for joint ventures because that was the conventional choice. By the end of 1990’s most of the discriminatory policies toward wholly owned subsidiaries have been removed and therefore many of the new investors do not even consider the joint venture option when planning their operations in China. The most important reason for the increase of wholly owned subsidiaries and the decrease of joint ventures in China is the changes in legislation and the more permissive foreign investment policy. In addition, foreign companies have also gained experience of China, and thus do not necessarily need a Chinese partner and the difficult joint venture form anymore.

Theoretical Contributions

As discussed in the literature review part, the question of entry mode decision has been studied and discussed widely in the international business literature. Several both complementary, overlapping and partly contradictory conceptual frameworks have been introduced and tested, but so far the existing literature has not reached an agreement on which conceptual framework should be used. This was already a challenging starting point. Creating a theoretical framework for this study was also challenging because most entry mode theories approach the question from the perspective of the investing companies, assessing only their experience, motives, resources etc. What most theories do not take into account is that especially in developing countries also host country governments play an important role in controlling FDI.

In the theoretical framework of this study I have combined both the perspectives of the company (and the prospective JV partner company) and the host country government and the host country environment. I have used this framework to describe how foreign companies’

entry mode choices in China have changed over time in a situation where a previously closed economy opens for foreign investment and gradually allows more freedom for foreign investors.

Managerial Implications

The experiences of other companies are valuable reading when planning operations in a foreign country. The case descriptions in this study show how changing environment and legislation in China affected the entry mode decisions of foreign companies in the late 1990's, and thus offer important background information to companies planning to invest in China. Drawing on the case studies one can conclude the following:

1. China is a difficult market where patience is required and where most foreign companies go with too high expectations in terms of profits and too optimistic schedules.
2. The key success factor is "how to sell to Chinese customers".
3. A company should not choose the joint venture form only to acquire local know-how. Joint venture should not be chosen unless it can be clearly defined in detail what is the contribution that the partner would bring to the venture.
4. Nowadays foreign companies, even those without earlier experience, can manage without Chinese partners. But they have to do their homework and plans well and hire local people.

Suggestions for Further Research

Wholly owned subsidiaries are a relatively new phenomenon in China, and therefore much remains to be studied. What are the success factors of WFOEs in China? What are the most common problems? Especially interesting research area would be organisational issues and human resource management in WFOEs in China. Also, the market and the regulations in China continue to change at a fast pace, therefore more research on foreign companies' entry strategies is justified.

In addition, although joint ventures in China have been studied widely, the topic is still timely because the environment and the nature of JVs is changing. What kind of companies still establish joint ventures in China today? For what purpose? How are they structured?

REFERENCES

BOOKS AND ARTICLES

- Agarwal, Sanjeev & Ramaswami Sridhar N. (1992). Choice of Foreign Entry Mode: Impact of Ownership, Location and Internalization Factors. *Journal of International Business Studies*, Vol. 23:1, pp. 1- 27.
- Ali-Yrkkö, Jyrki, Reilly Catherine and Shen Jian-Guan (1999). *The Long March to Asia*. ETLA The Research Institute of the Finnish Economy, series B155. Taloustieto Oy, Helsinki.
- Al-Obaidi, Zuhair (1999). *International technology transfer control: a case study of joint ventures in developing countries*. Series: A;151. Helsinki School of Economics and Business Administration, Helsinki.
- Anand, J. and A. Delios (1997) Location Specificity and the Transferability of Downstream Assets to Foreign Subsidiaries. *Journal of International Business Studies*, Vol 23:1, pp. 1-27.
- Andersen, O (1997). Internationalization and market entry mode; A review of theories and conceptual frameworks. *Management International Review*, 37 (special issue) pp. 27-42.
- Anderson, Erin and Gatignon Hubert (1986). Modes of foreign entry: A transaction cost analysis and propositions. *Journal of International Business Studies*, Fall: 1-26.
- Beamish, P.W. (1993). The Characteristics of Joint Ventures in the People's Republic of China. *Journal of International Marketing*, 1 (2), pp. 29-28.
- Behrman, Jack N., Fischer William A., Powell Simon G., Shapiro James A. (1991). *Direct Investment and Joint Ventures in China*. Quorum Books. New York.
- Brouthers, Keith D. and Lance Eliot Brouthers (2001). Explaining the National Cultural Distance Paradox. *Journal of International Business Studies*, Vol 32:1, pp. 177-189.
- Bruton, Garry D., David Ahlstrom and Eunice S. Chan (2000). Foreign firms in China: Facing human resource challenges in a transitional economy. *S.A.M. Advanced management Journal*. Vol. 65:4, pp. 4-11.
- Business China* (1998). The joy of being single. The Economist Intelligence Unit, September 14th 1998.
- Child, John and David K. Tse (2001). China's Transition and it's Implications for International Business. *Journal of International Business Studies*, Vol. 32:1, pp.5-21.
- China Monthly Economic Indicators 2001/8*. National Bureau of Statistics. Beijing.
- China Statistical Abstract 2001*. China Statistics Press. Beijing. (in Chinese)
- China Statistical Yearbooks 1990-2000*. China Statistics Press. Beijing.
- Chowdhury, J. (1992). Performance of international joint ventures and wholly owned foreign subsidiaries: A comparative perspective. *Management International Review*. Vol. 32:2, pp. 115-133.
- Country Profile: China, Mongolia 1998-99*. The Economist Intelligence Unit. London.

Datta, Deepak K. (1988). International Joint Ventures: A Framework For Analysis. *Journal of General Management*, Vol. 14, Winter, pp.78-90.

Dunning, John H. (1988). The Eclectic Paradigm of International Production: A restatement and some possible extensions. *Journal of International Business Studies*, Vol. 19:1, pp. 1-31.

Eisenhardt, Kathleen M. (1989). Building Theories from Case Study Research. *Academy of Management Review*, Vol. 14:4, pp. 532-550.

Erramilli, M.K. (1996). Nationality and Subsidiary Ownership Patterns in Multinational Corporations. *Journal of International Business Studies*, Vol. 27:2, pp. 225-248).

Erramilli M.K. and C.P. Rao (1993). Service Firms' International Entry-Mode Choice: A Modified Transaction-Cost Analysis Approach. *Journal of Marketing*, Vol. 57 (July), pp. 19-38.

Forest, Paper and Finland 2000 (article: Valmet's New Approach in China Operation; Interview to Mr Juhani Pakkala, CEO of Valmet Corporation). FCBS International Ltd. Espoo, Finland.

Gomes-Casseres, Benjamin (1989). Ownership Structures of Foreign Subsidiaries; Theory and Evidence. *Journal of Economic Behavior and Organization*, Vol. 11:1, pp. 1-25.

Gomes-Casseres, Benjamin (1990). Firm Ownership Preferences and Host Government Restrictions: An Integrated Approach. *Journal of International Business Studies*, Vol. 21:1, pp. 1-22.

Hamill, J. and Pamblos M. (1996). Joint Ventures in China: Same Bed, Different Dreams. *Asia Pacific Business Review*, 3(2), pp. 26-46.

Hanes, Kathryn (1998). Divorce in China. *Global Finance*, April, pp. 44-48.

Harrigan, Kathryn Rudie (1985). *Strategies for Joint Ventures*. Lexington Books.

Helsingin Sanomat (20.05.2002). Yritysten toiminta Kiinassa helpottuu, mutta kilpailu kovenee.

Helsingin Sanomat (12.9.2002). Rajun kasvun Etelä-Kiina ei vedä suomalaisia.

Hennart, Jean-Francois and Alexander Eapen (2001). A Bundling Theory of Foreign Market Entry. Presented at the 6th Workshop in International Business, University of Vaasa Finland, August 26-28, 2001.

Hill, C. W. L., P. Hwang and W. C. Kim (1990). An Eclectic theory of the Choice of International Entry Mode. *Strategic Management Journal*, II, pp. 117-128.

Johanson, J. and F. Wiedersheim-Paul (1975). The internationalization of the firm: Four Swedish cases. *Journal of Management Studies*, Vol. 12, pp. 305-322.

Johanson, J. and J.E. Vahlne (1977). The internationalization process of the firm – A model of knowledge development and increasing foreign market commitments. *Journal of International Business Studies*, Vol. 8 (Spring/Summer), pp. 22-32.

Johanson, J. and J. E. Vahlne (1990). The Mechanism of Internationalization. *International Marketing Review*, Vol. 7:4, pp. 11-24.

Kaiser, Stefan, Kirby David A., Fan Ying (1996). Foreign Direct Investment in China: An Examination of the Literature. *Asia Pacific Business Review*. Spring 1996, Vol. 2:3, pp. 44-65.

Kaukonen E. (1995). Joint Venture –yritykset: Suomalaisen yritysten mahdollisuus. In Huotari, Tauno-Olavi and Veli Rosenberg (eds.) (1995). *Kiinan kaupan käsikirja*. Suomi-Kiina-seura.

- Kauppalehti* (17.04.1996). Suomalaisia yhteisyrityksiä Kiinassa.
- Kauppalehti* (04.03.1997). Shanghain keskittymä vetää menestyviä suomalaisfirmoja.
- Kauppalehti* (26.03.1997). Koneen 150 miljoonan Kiinan investointi käynnistyi.
- Kauppalehti* (09.08.1999). Suomalaiset alihankkijat seuraavat Nokiaa Kiinaan.
- Kauppalehti* (16.03.2001). Wecan luottaa suureen Kiinaan.
- Kauppalehti* (29.11.2001). WTO-ratkaisu helpottaa pienyritysten sijoittumista, Kaukomarkkinat aikoo perustaa yhtiön Kiinaan.
- Kim, W. Chan and Peter Hwang (1992). Global Strategy and Multinationals' Entry Mode Choice. *Journal of International Business Studies*, First Quarter, pp. 29-53.
- Kogut, Bruce and Singh Harbir (1988). The Effect of National Culture on the Choice of Entry Mode. *Journal of International Business Studies*. Vol. 19:3, pp. 411-432.
- Larimo, Jorma (1992). *The Ownership Arrangement Decision in Foreign Direct Investments: An empirical study of Finnish Subsidiaries in OECD-countries*. Proceedings of the University of Vaasa, Discussion Papers 154. Vaasa.
- Larimo, Jorma and Mäkelä Elina (1995). *Foreign Direct Investment in Developing Countries, An empirical study of the behavior of Finnish Firms*. Proceedings of the University of Vaasa, Research paper 198. Vaasa.
- Lasserre, Philippe and Hellmut Schütte (1999). *Strategy and Management in Asia Pacific*. McGraw-Hill.
- Lin, Huang (2001). Choice of Market Entry Mode in Emerging Markets: Influences on Entry Strategy in China. *Journal of Global Marketing*, Vol. 14:1-2, pp. 83-109.
- Luo, Yadong and Chen Min (1997). Does guanxi influence firm performance? *Asia pacific Journal of Management*, Vol. 14, pp. 1-16.
- Luo, Yadong (2000a). Entering China Today: What Choices Do We Have? *Journal of Global Marketing*, Vol. 14:1-2, pp. 57-82.
- Luo, Yadong (2000b). Determinants of Entry in an Emerging Economy: A Multilevel Approach. *Journal of Management Studies*, Vol. 38:3, pp. 443-472.
- Luo, Yadong (2001). *How to Enter China: Choices and Lesson*. The University of Michigan Press, Michigan.
- Luostarinen, R. (1979). *Internationalization of the Firm*. Acta Academiae Oeconomicae Helsingiensis, Series A :30, Helsinki School of Economics, Helsinki.
- Luostarinen, Reijo and Welch Lawrence (1990). *International Business Operations*. Helsinki School of Economics. Helsinki.
- Madhok, A. (1997). Cost, value and foreign market entry mode: the transaction and the firm. *Strategic Management Journal*, Vol. 18:1, pp. 39-61.
- Martinson, M. and Tseng C. (1995). Successful Joint Ventures in the Heart of the Dragon. *Long Range Planning*, 28, pp. 45-58.

- Miles, Matthew B and A. Michael Huberman (1994). *Qualitative Data Analysis: an expanded sourcebook*. Sage Publications, Thousand Oaks.
- Moon, H Chang (1997). The choice of entry modes and theories of foreign direct investment. *Journal of Global Marketing*. Vol. 11:2, pp. 43-64.
- Neubel, Ed (1994) in Freeman Duncan (ed.). *Life and Death of a Joint Venture in China*. Asia Law and Practice Ltd. Hong Kong.
- Norton, Patrick M and Howard Chao (2000). Mergers and Acquisitions in China. *The China Business Review*, Sep/Oct 2001, pp. 46-53.
- Pan, Yigang (1996). Influences on Foreign Equity Ownership Level in Joint Ventures in China. *Journal of International Business Studies*, Vol. 27:1, pp. 1- 26.
- Pan, Yigang and Peter S.K. Chi (1999). Financial performance and survival of multinational corporations in China. *Strategic Management Journal*. Vol. 20, pp. 359-374.
- Pan, Yigang, Shaomin Li and David K. Tse (1999). The Impact of Order and Mode of Market Entry on Profitability and Market Share. *Journal of International Business Studies*, Vol. 30:1, pp. 81-103.
- Pan, Yigang and David K. Tse (2000). The Hierarchical Model of Market Entry Modes. *Journal of International Business Studies*, Vol. 31:4, pp. 535-554.
- Pan Yigang, Wilfried R. Vanhonacker, Robert E. Pitts (1995). International Equity Joint Ventures in China: Operations and Potential Close-Down. *Journal of Global Marketing*, Vol. 8:3-4, pp. 125-149.
- Penrose, E. T. (1959). *The Theory of the Growth of the Firm*. Basil Blackwell, London.
- Perlmutter, H.V. (1969). The Torturous Evolution of the Multinational Corporation. *Columbia Journal of World Business*, Jan-Feb, pp. 9-18.
- Ramamurti, Ravi (2001). The Obsolescing 'Bargaining Model'? MNC-Host Developing Country Relations Revisited. *Journal of International Business Studies*, Vol. 32:1, pp. 23-39.
- Reuvid Jonathan and Li Yong (eds.) (2000). *Doing Business with China*. Kogan Page in association with China's Ministry of Foreign Trade and Economic Cooperation.
- Root, Franklin R. (1994). *Entry Strategies for International Markets*. Lexington Books, New York.
- Shane, S. (1994). The Effect of National Culture on the Choice Between Licesing and Direct Foreign Investment. *Strategic Management Journal*, Vol. 15, pp. 627-642.
- Shenkar, Oded (1990). International Joint Ventures, Problems in China; Risks and Remedies. *Long Range Planning*, 23 (Winter), pp. 106-134.
- Sipilä, Mikko (1996). *Finnish Direct Investment and Joint Ventures in China*. Pro Gradu. Helsinki School of Economics, Helsinki.
- Suonperä, Katja (1999). *The performance of joint ventures - the case of joint ventures of Finnish small- and medium-sized enterprises in China*. Pro Gradu. Helsinki School of Economics, Helsinki.
- Sutter Karen M. (2000). Investors' Growing Pains. *The China Business Review*, Nov/Dec 2000, Vol. 27:6, pp. 14-21.
- Talouselämä (09.03.2001). Kiinan kysyntä sopii suomalaisille.
- Talouselämä (31.08.2001). Kasvu-Kiina pelastaa.

- Tao, Jingzhou (1998). Commercial Divorce. *The China Business Review*, Nov/Dec, pp. 24-27.
- Tse, David K., Pan Yigang, Au Kevin Y. (1997). How MNC's Choose Entry Modes and Form Alliances: The China Experience. *Journal of International Business Studies*, Fourth Quarter, pp. 779-805.
- UNCTAD (1998). *World Investment Report, 1998*. United Nations, New York.
- Vanhonacker, Wilfried (1997). Entering China: An Unconventional Approach. *Harvard Business Review*, March April 1997, Vol. 72:2, pp.130-140.
- Williamson, O. E. (1979). Transaction-Cost Economics: The Governance of Contractual Relations. *Journal of Law and Economics*, 22, pp.233-261.
- Wong, Yim Yu, Maher T.E., Jenner R.A., Appell A.L., Hebert L.G. (1999). Are Joint Ventures Losing Their Appeal in China? *SAM Advanced Management Journal*, Vol. 64:1, pp. 4-16, 20.
- Yin, Robert K. (1989). *Case Study Research: Design and Methods*. Sage Publications, London.
- Zee, Winston and Victor Ho (1994) in Freeman Duncan (ed.). *Life and Death of a Joint Venture in China*. Asia Law and Practice Ltd. Hong Kong.
- Zeng, Xianwu (2002). Trading rights after China's WTO entry. *The China Business Review*, Jan/Feb 2002, pp. 16-20.

ANNUAL REPORTS AND PRESS RELEASES

- Fortum Annual Reports 1998 and 1999.
- Kaukomarkkinat Annual Report 2001.
- Metso Annual Reports 1999, 2000 and 2001.
- Novo Group Annual Reports 1999, 2000 and 2001.
- Novo Group press release (01.09.1999). Novo founded a company in China.
- Novo Group press release (03.07.2000). Novo Strengthens Its Position In China - A New Company To Guangzhou.
- Neste Annual Reports 1996 and 1997.
- Thermo Labsystems press release (5.5.2000). Labsystems inaugurated a new laboratory equipment factory in the Shanghai Pudong area on 28 April.
- Wecan Electronics Annual Report 2001.

WEBSITES

- Efore website, www.efore.fi. Accessed 19.3.2002.
- Kaukomarkkinat website: www.kaukomarkkinat.fi. Accessed 5.5.2002.
- Kesko website: www.kesko.fi. Accessed 5.5.2002.

Metso website: www.metso.com. Accessed 29.7.2002.

Metso Minerals website: www.metsominerals.com. Accessed 29.7.2002.

MOFTEC (Ministry of Foreign Trade and Economic Cooperation) www.moftec.gov.cn. Accessed 14.2.2002.

Novo Group website: www.novogroup.com. Accessed 4.5.2002.

Shanghai Foreign Investment Commission: www.investment.gov.cn. Accessed 4.5.2002.

ThermoLabsystems website: www.labsystems.fi. Accessed 2.6.2002.

Wecan Eletronics website: www.wecan.fi. Accessed 4.5.2002.

INTERVIEWS

Aakula Pauli (17.5.2002). Managing Director, Wecan Electronics.

Hallamaa Kimmo (6.8.2002). CEO of Metso Minerals Tianjin.

Kaislaniemi Ilpo (15.4.2002). Vice President, Finpro.

Lukkarinen Ilkka (14.6.2002). Vice President, ThermoLabsystems.

Niukkala Janna (3.5.2002). Head of Guangzhou Novo Information Technology Development Co. Ltd..

Paasonen Erkki (18.6.2002). Former head of Shanghai Labsystems.

Saastamoinen Tapani (7.5.2002). Head of Kauko East-West Trade (Far East), Kaukomarkkinat.

Sierla Heikki (15.5.2002). Former head of Neste Kunshan., Fortum (former Neste).

PRESENTATIONS

Björkman, Ingmar (22.5.2002) Professor, Swedish School of Economics and Business Administration. "Foreign trade and investments – Multinational enterprises viewpoint." Presentation at a seminar 'China and WTO' organized by Sitra, Bank of Finland and Helsinki University.

Kaislaniemi, Ilpo (22.05.2002) Senior Consultant, Finpro. "WTO membership of China and Finnish companies." Presentation at a seminar 'China and WTO' organized by Sitra, Bank of Finland and Helsinki University.

Seppälä, Jukka (22.05.2002) Business Development Manager, Metso Oyj. "Metso in China." Presentation at a seminar 'China and WTO' organized by Sitra, Bank of Finland and Helsinki University.

APPENDIX 1

CONTRIBUTIONS OF FDI TO CHINA'S ECONOMY, 1991-1997

Item	1991	1992	1993	1994	1995	1996	1997
FDI inflows (\$ bil)	4,4	11,2	27,5	33,8	35,8	40,8	45,8
Average amount per project (\$ mil)	0,9	1,2	1,3	1,8	2,5	na	na
FDI/gross domestic investment (%)	3,9	7,4	12,7	17,3	15,1	17,0	14,8
FDI stock/GDP (%)	5,6	7,1	10,2	17,6	18,8	24,7	na
FIE exports (\$bil)	12,0	17,4	25,2	34,7	46,9	61,5	75,0
FIE exports/national exports (%)	17,0	20,4	27,5	28,7	31,3	41,0	41,0
FIE output/national output (%)	5,0	6,0	9,0	11,0	13,0	na	18,6
Number of employees (mil)	4,8	6,0	10,0	14,0	16,0	17,0	17,5
Tax contribution as a share of total	na	4,1	na	na	10,0	na	13,2

Adapted from UNCTAD (1998).

APPENDIX 2

Case Interview Outline

1. Basic company information
2. International operations of the case company
3. Company history in China / other business units in China.
4. What were the motivations for investing in China?
5. Basic data of the wholly owned subsidiary (the case unit) in China.
How did the establishing process proceed?
6. What were the reasons for choosing the wholly owned mode?
Was joint venture considered? Why it was not chosen?
7. The role of Chinese officials in the entry mode choice and the operations of the unit.
8. Local know-how and guanxi.
9. Human resources of the unit.
10. Present situation:
How the operations have developed?
Turnover and profitability
What kind of problems the company has experienced?
11. Future:
Future prospects, both operational and financial
The effects of WTO
12. Entry modes in China in general:
What do you see as the most important reasons for the increase of wholly owned subsidiaries in China?
What are the challenges/advantages/disadvantages of a wholly owned subsidiary/joint venture?
What will happen in the future? Is the era of JVs in China over?

APPENDIX 3

Catalogue for the Guidance of Foreign Investment Industries

(Source: Shanghai Foreign Investment Commission: www.investment.gov.cn.)

Approved by the State Council on December 29, 1997, and promulgated by the State Planning Commission, the State Economic and Trade Commission and the Ministry of Foreign Trade and Economic Cooperation on December 31, 1997.

Encouraged Foreign Investment Industries

I Agriculture, Forestry, Animal Husbandry, Fishery and Related Industries

1. Reclaiming and development of wasteland, waste mountain, inter-tidal zone (except those with military facilities), as well as improvement of low-and medium- yielding field
2. Development of new varieties of fine quality, high-yielding crops such as sugar-yielding crops, fruit trees, vegetables, flowers and plants, forage grass and related new techniques
3. Serialization production of soilless cultivation of vegetables, flowers and plants
4. Planting of forest trees and introduction of fine strains of forest trees
5. Breeding of good strains of domestic animals, fowls and aquatic fingerlings (not including special, precious good strains of our country)
6. Breeding of famous, special and fine aquatic products
7. New varieties of effective and safe agricultural chemicals and pesticides (over 80 percent insect death rate, safe to people, animals and crops)
8. High-density fertilizers (potash fertilizer, phosphate fertilizer)
9. New technologies for the production of agricultural films, and development of new products (fiber film, photolysis film, multi-functional film and raw materials)
10. Antibiotic material medicals (including antibiotic and chemical synthesis)
11. New products or new forms of anthelmintic, insecticide, anti-coccidiosis medicines used for animals
12. Development of feed additive, and feed protein resources
13. New technology and equipment for the storage, preservation, drying and processing of food, vegetables, fruits, meat products, and aquatic products
14. Forestry chemicals and new technology and products for the comprehensive utilization of "sub-quality, small and firewood" lumber and bambod in the forest area
15. Construction and management of key water control projects for comprehensive utilization (The Chinese party will be the holding party or play a leading role.)
16. Manufacture of new type water-saving irrigation technical equipment
17. Manufacture of new technical agricultural machinery
18. Improvement and construction of ecological environment

II Light Industry

1. Design, processing, and manufacture of molds for non-metal products
2. Paper pulp (with an annual production capacity of over 170 thousand tons of pulp and a related raw material base)
3. Post ornament and processing of leather and related new-tech equipment
4. Production of non-mercury alkali-manganese secondary battery and lithium- ion battery
5. Manufacturing of high-tech involved special industrial sewing machines
6. Production of polyamide film
7. Production of new- type, highly efficient enzymic preparations
8. Production of synthetic spices, single ion spices
9. Research and popularization of the applied technology of freon substitution
10. Production of diacetate for cigarette making and processing of tows

III Textile Industry

1. Production of wood pulp for textile chemical fiber (construction of raw material base with an annual output capacity of over 100 thousand tons)
2. Special textiles for industrial use
3. Printing and dyeing as well as post processing of high emulation chemical fiber plus material
4. Production of assistant, grease, and dye-stuff for textile

IV Communication and Transportation as well as Post & Telecommunications Services

1. Technical equipment for railway transportation: the design and manufacture of locomotives and main parts, the design and manufacture of line facility and equipment, related technology and equipment manufacture for rapid transit railway, manufacture of equipment for communicational signals and transportation safety monitoring, manufacture of electric railway equipment and instruments
2. Construction and management of feeder railways, local railways, and related bridges, tunnels, and ferry facilities (wholly foreign owned enterprises are not allowed)
3. Design and manufacture of new-type mechanical equipment for highway and port and related designing and manufacturing technologies
4. Construction and management of city subway and light rail (The Chinese party will be the holding party or play a leading role)
5. Construction and management of highways, independent bridges and tunnels, and port facilities (for public wharfs, and the Chinese party will be the holding party or play a leading role)
6. Construction and management of public dock facilities of ports (the Chinese party will be the holding party and play a leading role)
7. Construction and management of civil airport (the Chinese party will be the holding party or play a leading role)

8. Production of the equipment of DCS/CDMA
9. Production of digital serial transmission equipment of photo-timing and micro-wave synchronization of 5 GB/S or above
10. Production of metering devices of 2-5 GB/S for photo communication, wireless communication and data communication
11. Production of AMT exchange boards

V Coal Industry

1. Design and manufacture of coal mining, conveyance and concentration equipment
2. Coal's mining and ore-dressing by washing the Chinese party will be the holding party or play a leading role in the mining and ore-dressing by washing of special and rare kinds of coal)
3. Production of water-coal and liquefied coal
4. Comprehensive development and utilization of coal
5. Comprehensive development and utilization of low-thermal-value fuel and associated resources
6. Pipe-transportation of coal
7. Exploration and development of coal bed gas

VI Power Industry

1. Construction and management of heat power station with a single machine's installed-capacity of 100 thousand kilowatts or above
2. Construction and management of hydropower station with the main purpose of power generating
3. Construction and management of nuclear power station (the Chinese party will be the holding party or play a leading role)
4. Construction and management of power station with the technology of clean coal burning
5. Construction and management of new energy power station (including solar energy, wind energy, magnetic energy, geothermal energy, tide energy and biological mass energy, etc.)

VII Ferrous Metallurgical Industry

1. 50 ton or above super-high power electric furnace (equipped with the ability of external refining and continuous casting) and 50 ton or above converter steel-making
2. Smelting of stainless steel
3. Production of cold-rolled silicon steel tape
4. Production of hot-rolled and cold-rolled stainless steel plate
5. Steel pipeline for transmitting petroleum
6. Processing and treatment of steel scrap
7. Extraction and selection of iron and manganese ores
8. Production of direct reduced iron and retooled iron
9. High alumina vitriol earth, hard clay mining and grog production
10. Deep processing of needle coke, hard coke and coal tar
11. Production of dry coke quenching

VIII Non-Ferrous Metal Industry

1. Production of mono-crystalline silicon (with a diameter of 8 inches or over) multi-crystalline silicon
2. Production of hard alloy, tin compound, and antimony compound
3. Production of non-ferrous composite materials, new type alloy materials
4. Copper, lead, tin mining (wholly foreign owned enterprises are not allowed)
5. Aluminum mining (wholly foreign owned enterprises are not allowed) and alumina (3,000, 000 tons or more a year)
6. Rareearth application

IX Petroleum, Petrochemical and Chemistry Industries

1. Manufacture of ion film for caustic soda
2. Ethylene (with an annual production capacity of 600, 000 tons or over, and the Chinese party will be the holding party or play a leading role)
3. Corvic (the Chinese party will be the holding party or play a leading role)
4. Comprehensive utilization of ethylene side-products such as C5 - C9.
5. Engineering plastics and plastic alloys
6. Supporting raw materials for synthesized materials (bisphenol-A, butadienestyrene latex, pyridine, 4,4' diphenylmethane, diisocyan ester, and vulcabond toluene)
7. Comprehensive utilization of basic organic chemical raw materials: the derivatives of benzene, methylbenzene, (para-, ortho-, or meta-) dimethylbenzene
8. Synthetic rubber (liquid butadiene styrene rubber by butadiene method, butyl rubber, isoamyl rubber, ethyl rubber, butadiene neoprene rubber, butadiene rubber, acrylic rubber, chlorophydrin rubber)
9. Fine chemistry: new products and technology for dye-stuff, interinediate, catalytic agent, auxiliary, and pigment; processing technology for the commercialization of dye (pigment); electronics and high-tech chemicals for paper-making, food additives, feed additives, leather chemical products, oil-well auxiliaries, surface active agent, water treatment agent, adhesives, inorganic fiber, inorganic powder stuffing and equipment
10. Chloridized titanium dioxide
11. Production of chemical products using coal as raw material
12. Comprehensive utilization of exhaust gas, discharge liquid, waste slag
13. Production of depurant of automobile tail gas; catalytic agent and other assistant
14. Development and utilization of tertiary oil recovery which can increase the recovery ratio of petroleum (the Chinese party will be the holding party or play a leading role)
15. Construction and management of oil and gas delivery pipes, as well as oil depot and oil wharf (the Chinese party will be the holding party or play a leading role)

X Mechanical Industry

1. Manufacture of high performance welding robot and effective welding and assembling production line
2. High temperature resistant insulation material (with F, H insulation class) and mould casted insulation products
3. Manufacture of equipment for mining, loading and transporting in the well, 100 or over tons of mechanical power-driven dump trucks for mining, mobil crushers, double input and output coal grinder, 3, 000m³/h or over bucket excavator, 5m³ or larger mining loader, full-face tunneling machines

4. Manufacture of multi-color offset press for web and folio or paper of larger size
5. Manufacture of cleaning equipment for electro-mechanical wells and production of medicals
6. Manufacture of turbine compressor and combined powder machine for the complete set of equipment for an annual production of 300, 000 tons or over of synthetic ammonia, 480, 00 tons or over of urea, 300, 000 tons or over of synthetic ammonia, 300, 000 tons or over of ethylene
7. Manufacture of complete set of equipment of new type of knitting machine, new type of paper (including pulp) making machine
8. Development and manufacture of precision on-line measuring instrument
9. Manufacture of new technical equipment for safe production and environment protection detecting instruments
10. New type of meters' spare parts and materials (mainly new switches and function materials for meters such as intelligent sensors, electrical adapters, flexible circuit plate, photoelectric switches, and proximity switch, and so on)
11. Research, design and development center of important basic machinery, basic parts and important technical equipment
12. Development of proportional, servo-hydraulic technology and production of low-power pneumatic control valve and stuffing static seal.
13. Production of precision trimming dies, precision cavity modes and matrix standard components
14. Manufacture of 250, 000 tons/day city sewage-disposal equipment, industrial sewage film treatment equipment, up-flow anaerobic fluidized bed equipment and other biological sewage disposal equipment, slab making equipment of powder coal ash (5-10 tons/year), recycling equipment for waste plastics, equipment for desulphurization and denitration equipment of industrial tuiler, large high-temperature resistant, acid resistant bag dust remover
15. Manufacture of precision bearings and all kinds of bearings used
16. Manufacture of key spare parts for cars: complete brakes, complete driving rods, gearbox, steering knuckle, fuel pump of diesel engine, piston (including pistoning), valve, hydraulic tappet, axle bush, booster, filter (3 filtering), even speed cardan joint, shock absorber, seat adjustor, car lock, backview mirror, glass lifter, compound meter, light, bulb, car fastener
17. Manufacture of car and motorcycle molds (including strike moulds, plastics filling moulds, mould-pressing moulds, etc.) and clippers (welding clipper, testing clippers, etc.)
18. Production of casted and forged semifinished products for cars and motorcycles
19. Car and motorcycle technology research center, and design and development institute
20. Cars for special purposes such as desert cars for petroleum industry
21. Production of key spare parts for motorcycles: carburetors, magnetors, starting motors, lamps, disc brakes
22. Manufacture of new-tech equipment of water quality on-line detecting instrument
23. Manufacture of special machines and equipment for flood prevention and emergency rescue
24. Manufacture of earth - movers for wet land and desilting machines
25. Manufacture of integrated equipment with a feed processing capacity of 10 tons or more an hour, and the production of spare parts
26. Design and manufacture of new instruments and equipment for petroleum exploration and development

XI Electronic Industry

1. Large scale production of integrated circuit with a line width of 0.35 micron or a smaller line width
2. New type electronic spare parts (including slice spare parts) and electric and electronic spare parts
3. Manufacture of photoelectric components, sensitive components and sensors
4. Manufacture of large and medium sized computers
5. Manufacture of compatible digital TV, HDTV, digital video tape recorder and player
6. Development of semi-conductor, photo electronic materials
7. Manufacture of new type displays (plate displays and displaying screens)
8. Development of 3-dimension CAD, CAT, CAM, CAE and other computer application systems
9. Manufacture of special electronic equipment, instruments, and industrial mould
10. Manufacture of hydrological data collection instrument and equipment
11. Manufacture of equipment of satellite communication
12. Manufacture of digital cross-linking equipment
13. Manufacture of air traffic control equipment (wholly foreign owned enterprises are not allowed)
14. Development and manufacture of high-capacity mass storage of laser-disks, disks and parts.
15. Development and manufacture of new type printing devices (laser-printers, etc.)
16. Manufacture of equipment of multi-media system of data communication
17. Production of single mode optical fiber
18. Manufacture of equipment for cut-in communication system
19. New technical equipment supporting communication network
20. Manufacture of ISDN.

XII Building Materials, Equipment and Other Non-metal Mineral Product Industries

1. Production line of fine-quality floating glass with a daily melting capacity of 500 tons or over
2. Production line of high level sanitation porcelain with an annual production of 500, 000 pieces as well as auxiliary hardware parts and plastic parts
3. New building materials (materials for wall, decorating and finishing materials, water-proof materials, and thermal insulation materials)
4. Production line of new type dry process cement of clinker with a daily output capacity of 4, 000 tons or more (only in the mid-west region of this country)
5. Bulk cement storage and transportation facilities
6. Production line of glass fiber (through direct melting process) and glass fiber reinforced plastics with and annual capacity of 10, 000 tons or more
7. Manufacture of non-organic, non-metal materials and products (quartz glass, artificial crystal)
8. Production of high-class refractory material used in furnaces for glass, ceramics and glass fiber
9. Deep processing technique and equipment of plate glass
10. Manufacture of tunneling machine, equipment for covered digging of city metro
11. Manufacture of special equipment for cities' sanitation work
12. Manufacture of tree transplanters
13. Manufacture of machines for road planning and repairing

XIII Medicine Industry

1. Chemical medicines under patent and administrative protection in our country, medical intermediate specially used in medicine which we have to import
2. Analgesic-antipyretic which has to be produced through new technical equipment
3. Vitamins: niacin
4. New type of anticarcinogen and cardio-vascular and cerebrovascula medicines
5. Medicines and pharmaceuticals: new products and new forms of drug produced by means of slow release, control release, target preparation and those absorbed through skins
6. Amino acid: serine, tryptophan, histidine, etc.
7. Wrapping materials and containers for new medicines and other advanced pharmaceutical equipment
8. New, effective and economical contraceptive medicines and devices
9. New technology, equipment and instruments that control the quality of traditional Chinese medicine and change the packaging
10. New analytical and extraction technology and equipment of the effective part of traditional Chinese medicine
11. New medicines which are produced by means of biological engineering technology
12. Development and utilization of new type adjuvant
13. Production of diagnosis reagent for hepatitis, AIDS, and radio-immunity diseases

XIV Medical Equipment Industry

1. Medical X-ray machine set with medium-frequency technique, computer control technique, and digital imagery processing technique
2. Electronic endoscope
3. Tubes for medical use

XV AeroSpace Industry

1. Design and manufacture of civil planes (the Chinese party will be the holding party or play a leading role)
2. Manufacture of spare parts for civil planes
3. Design and manufacture of airplane engines (the Chinese party will be the holding party or play a leading role)
4. Manufacture of air-borne equipment
5. Manufacture of light gas turbine engine
6. Design and manufacture of civil satellites (the Chinese party will be the holding party or play a leading role)
7. Manufacture of civil satellite payload (the Chinese party will be the holding party or play a leading role)
8. Manufacture of spare parts for civil satellites
9. Development of the application technique of civil satellites
10. Design and manufacture of civil carrier rockets (the Chinese party will be the holding party or play a leading role)

XVI New Industries

1. Microelectronic technology
2. New materials
3. Biological engineering techniques (not including genetic engineering)
4. Network techniques of information, communications systems
5. Isotopic irradiation and laser techniques
6. Ocean and ocean energy development technology
7. Seawater desalting and seawater utilization technology
8. Development of energy-saving technology
9. Technology for recycling and comprehensive utilization of resources
10. Projects for improving polluted environment and related monitoring and improving technology

XVII Service Business

1. Information Consultation about information of international economy, science & technology and environmental protection
2. Maintenance of precision instruments and equipment, service after sales
3. Construction of new and high technology and building of new product developing center as well as incubation of enterprises

XVIII Permitted projects whose products are to be wholly exported directly

Restricted Foreign Investment Industries

(A)

I Light Industry

1. Production of washing machines, refrigerators, freezers
2. Production of synthetic emtrol, alcohol ether and alcohol ether sulfate
3. Manufacture of compressors with a shaft power of 2 kw or less which are specially used for air-conditioners and refrigerators.

II Textile Industry

1. Chemical fiber drawnwork of conventional chipper
2. Production of viscose staple fiber with an annual single thread output capacity of less than 20, 000 tons

III Petroleum, Petrochemical, Chemical Industries

1. Barium salt production
2. Refinery with an output capacity of less than 5 million tons a year
3. Cross-ply and old tire reconditions (not including radial tire)
4. Production of sulphuric acid basic titanium white

IV Machinery Industry

1. Manufacture of equipment for producing long dacron thread and short fiber
2. Manufacture of power generating units of diesel engines

3. Production of all kinds of ordinary abrasives (containing boule and silicon-carbide), grindstone with a diameter of less than 400 mm and man-made diamond saw bit
4. Production of electric drill and electric grinder
5. Ordinary carbon steel welding rod
6. Ordinary standard fasteners, small and medium sized ordinary bearings
7. Ordinary lead acid accumulator
8. Containers
9. Elevators
10. Alufer hub

V Electronics Industry

1. Satellite television receiver and key parts
2. Exchange boards for the use of digital program-control bureau and for the use of private branch exchange

VI Medicine Industry

1. Production of chloramphenicol, lincomycin, gentamicin, dihydrostreptomycin, amikacin, tetracycline hydrochloride, oxytetracycline, acetyl spiramycin, medemycin, kitasamycin, ilotycin, norfloxacinum and ofloxacin
2. Production of Analgin, aspirin, paracetamol, Vitamin B1, Vitamin B2 and Vitamin B6

VII Medical Apparatus and Instruments

1. Production of low or medium class type-B ultrasonic displays

VIII Transportation Service

1. Taxi (The purchase of cars is restricted within China)
2. Gas station (restricted to projects related to super highway)

(B)

I Agriculture, Forestry, Animal Husbandry, Fishery and Related Industries

1. Development and production of food, cotton and oil-seed (the Chinese part will be the holding party or play a leading role)
2. Processing and export of the logs of precious varieties of trees (wholly foreign owned enterprises are not allowed)
3. Inshore and continental-river fishing (wholly foreign owned enterprises are not allowed)
4. Cultivation of traditional Chinese medicines (wholly foreign owned enterprises are not allowed)

II Light Industry

1. Product of table salt, and salt for industrial use
2. Production of non-alcoholic beverage of foreign brand (including solid beverage)
3. Production of mille wine and famous brands of spirits
4. Tobacco processing industries such as cigarettes and filter tips
5. Processing and production of blue wet hide of pig, cow and sheep
6. Production of natural spices
7. Processing of fat or oil
8. Paper and paper plate

III Textile industry

1. Wool spinning, cotton spinning
2. Raw silk, gray silk fabric
3. Highly emulated chemical fiber and special kinds of fiber such as aromatic synthetic fiber, and carbon fiber (wholly foreign owned enterprises are not allowed)
4. Fiber and polyester, acrylic fiber and spandex which are not used as fiber (wholly foreign owned enterprises are not allowed)

IV Communication and Transportation, Post and Telecommunications Industries

1. Construction and management of main lines of railways (the Chinese party will be the holding party or take a leading role)
2. Transportation by water (the Chinese party will be the holding party and take a leading role)
3. Entry and exit automobile transportation (wholly foreigner owned enterprises are not allowed)
4. 4.Air freight (the Chinese party will be the holding party or play a leading role)
5. General aviation (the Chinese party will be the holding party or play a leading role)

V Power Industry

1. Construction and management of conventional coal-fired power plants whose single-machine capacity is less than 300, 000 kw (with the exception of small power grid, power plants in remote area and power plants of low-quality coal and coal refuses)

VI Non-ferrous Metal Industry (wholly foreign owned enterprises are not allowed)

1. Copper and aluminum processing
2. Mining, dressing, smelting, and processing of precious metals (gold, silver, platinum families)
3. Mining of non-ferrous metals such as wolfram, tin and antimony
4. Exploration, mining, selection, smelting and separation of rare-earth metal

VII Petroleum, Petrochemical Industry and Chemical Industry

1. Sensitive materials (cartridge, film, PS plate, and photographic paper)
2. Mining and processing of baron, magnesium, iron ores
3. Benzidine
4. Chemical industry products such as ionic membrane caustic soda and organochlorine serial products
5. Radial tire (the Chinese party will be the holding party or play a leading role)
6. Synthetic fiber raw materials: precision terephthalic acid, vinyl cyanide, caprolactam and nylon 66 salt

VIII Mechanical Industry

1. Complete automobiles (including limousines, trucks, passenger cars, and reequipped cars) and complete motorcycles (the Chinese party will be the holding party and take a leading role)
2. Engines of automobiles and motorcycles (the Chinese party will be the holding party or take a leading role)
3. Production of compressors of air conditioners for cars, electron-controlled fuel-oil injecting systems, electronic controlled brake and locking-prevention systems, safety aerocysts and other electronic equipment, power generating machines and aluminum radiating machines
4. Reconditioning and disassembling refitting of old cars and motorcycles
5. Fire power equipment: (power unit, turbine, boiler, supplementary machine and controlling equipment) manufacture of units of over 100, 000kw, gas turbine combined cycle power equipments, cyclic fluidized bed boiler, coal gasification combined cyclic technique and equipment (IGCC), pressure boost fluidized bed (PFBC), desulfurization and denitrification equipment (wholly foreign owned enterprises are not allowed)
6. Hydroelectric equipment: manufacture of hydropower generating units with a wheel diameter of over 5 meters (including hydropower supplementary machines and controlling units), large scale pump storage groups of over 50,000kw, large scale tubular turbine units of 10, 000 kw or over (wholly foreign owned enterprises are not allowed)
7. Nuclear power group: manufacture of nuclear power groups of 600, 000kw or over (wholly foreign owned enterprises are not allowed)
8. Manufacture of power transmitting and transforming equipment: large scale transformers of 200 kilovolts or over high-voltage switches, mutual inductor, cable equipment (wholly foreign owned enterprises are not allowed)
9. Manufacture of crawler dozers of less than 320 horsepower, wheeled fork-lift of less than 3 cubic meters, and cranes of less than 50 tons (wholly foreign owned enterprises are not allowed)
10. Manufacture of sheet continuous caster
11. Duplicators and cameras

IX Electronic Industry

1. Color TV (including projection television), color picture tube and glass envelope
2. 2Video cameras (including camera-recorder in one unit)
3. Video recorders and magnetic heads, magnetic drums and movements of video recorder
4. Analogue type mobile communications systems (honey-comb, colony, wireless beeper call, wireless telephone)
5. Receiving equipment of satellite navigation and key parts (wholly foreign owned enterprises are not allowed)
6. Manufacture of the system of VSAT
7. Manufacture of photo-timing digital serial communication systems of less than 2.5 GB/S and microwave communication systems of 144MB/S and lower

X Building Material Equipment and Other Non-metal Product Industries Exploration, mining and processing of diamond and other natural gems (wholly foreign owned enterprises are not allowed)

XI Medicine Industry

1. Traditional Chinese herb medicines, Chinese patent drug semis and finished products with the exception of preparing technique of traditional Chinese herb medicine in small pieces ready for decoction)
2. Precursor of narcotics: ephedrine, pseudoephedrine, ergotinine, ergotamine, lysergic acid and so on
3. Penicillin G
4. Production of addiction narcotic and psychoactive drug (the Chinese party will be the holding party or play a leading role)
5. Production of vaccines that involve high tech: vaccine against AIDS, vaccine against type-C hepatitis, contraceptive vaccine and so on (the Chinese party will be the holding party or play a leading role)
6. Immunity vaccines included in the State's plan, bacterins, antitoxins and anatoxin (BCG vaccine, poliomyelitis, DPT vaccine, measles vaccine, Type-B encephalitis, epidemic cerebrospinal meningitis vaccine)
7. Production of Vitamin
8. Production of blood products

XII Medical Apparatus and Instruments Industry

1. Disposable injectors, transfusion systems, blood transfusion systems and blood bags
2. Manufacture of large medical treatment equipment such as CT, MRI and accelerators for medical use

XIII Shipping Industry (the Chinese party will be the holding party or play a leading role)

1. Repairing, design and manufacture of special ships, high performance ships and over 35, 000-ton ships
2. Design and manufacture of diesel engines for ships, auxiliary machines, wireless communication, navigation equipment and parts

XIV Domestic and Foreign Trade, Tourism, Real Estate and Service Industry (wholly foreign owned enterprises are not allowed)

1. Domestic commerce (the Chinese party will be the holding party or play a leading role)
2. Foreign trade (the Chinese party will be the holding party or play a leading role)
3. Tourist agencies
4. Cooperative school-running (with the exception of elementary education)
5. Medical establishments (the Chinese party will be the holding party or play a leading role)
6. Accounting, audit and legal consultation services and agent company
7. Agent services (boats and ships, freight, futures, sales, advertisement, etc.)
8. High-ranking hotels, villas, high-class office buildings, and international exhibition centers
9. Golf links
10. Development of pieces of land
11. Large scale tourist, cultural and recreational parks and artificial landscapes
12. Construction and management of State-ranking tourist areas

XV Finance and Relevant Trades

1. Banks, finance companies and trust investment companies
2. Insurance companies, insurance brokerages and underwriting agent companies
3. Bond companies, investment banks, merchant banks, fund management companies
4. Financial lease

5. Foreign exchange brokerages
6. Financial, insurance and foreign exchange consultation
7. Production, processing, wholesales and retail of gold, silver, gems, and jewelry

XVI Miscellaneous

1. Printing, publishing and issuing business (the Chinese party will be the holding party or play a leading role)
2. Testing, appraising and attestation business of import and export goods (wholly foreign owned enterprises are not allowed)
3. Production, publications and issuing of audio and video products and electronic publications (the Chinese party will be the holding party or play a leading role)

XVII Other industries Restricted by the State or International Treaties that China Has Concluded or Taken Part in

Prohibited Foreign Investment Industries

I Agriculture, Forestry, Animal Husbandry, Fishery and Related Industries

1. Wild animal and plant resources protected by the State
2. China's rare precious breeds (including fine genes in plants industry, husbandry and aquatic products industry)
3. Construction of animal and plant natural reserves
4. Processing of green tea and specialties (famous teas, dark tea, etc.)

II Light Industry

1. Ivory carving and tiger-bone processing
2. Hand-made carpet
3. Bodiless lacquerware
4. Enamel products
5. Blue and white porcelain
6. 'Xuan paper' and ingot-shaped tablets of Chinese ink

III Power Industry and Urban Public Utility

1. Construction and management of electricity network
2. Construction and management of urban networks of water supply, water drainage, gas and heat power

III Exploration, Selection, or Processing of Mining Industry

1. Exploration, selection, smelting or processing of radioactive mineral products
2. Petroleum Industry, Petrochemical Industry and Chemical Industry
3. Mining and processing of szaibelyite
4. Mining and processing of celestine

IV Medicine Industry

1. Traditional Chinese medicines, which have been listed as State protection resources (musk, licorice root etc.)
2. Preparing technique of traditional Chinese medicine in small pieces ready for decoction and products of secret recipe of traditional Chinese medicine already prepared

V Transportation and Post & Telecommunications Services

1. Management of post and telecommunications business
2. Air traffic control

VI Trade and Finance

1. Commodity future, financial future and related finance business

VII Broadcasting and Film Industries

1. Broadcasting stations, TV stations (networks) at various levels, launching stations and relay stations
2. Production, publishing, or issuing of broadcasting and TV programs
3. Production, publishing, issuing or showing of films
4. Video tape showing

VIII Journalism

IX Manufacturing Industry of Weapons

X Miscellaneous

1. Projects that endanger the safety and performance of military facilities
2. Developing and processing of carcinogenic, teratogenic, and mutagenesis raw materials
3. Racecourse, gambling
4. Pornographic service

XI Other Industries Prohibited by the State or by International treaties China Has Concluded or Taken Part In